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REPORT OF THE MANAGEMENT/PERFORMANCE AND FINANCIAL AUDIT OF THE FUEL AND PURCHASED POWER RIDER OF THE DAYTON POWER AND LIGHT COMPANY (09-1012-EL-FAC)

April 29, 2011

Prepared for: PUBLIC UTILITIES COMMISSION OF OHIO

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Report of the Management/Performance and Financial Audit of the Fuel Purchased Power Rider of The Dayton Power and Light Company (09-1012-EL-EFC)

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1 EXECUTIVE SUMMARY

The Dayton Power & Light Company (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). Under an approved stipulation, DP&L's rates were set pursuant to a rate stabilization plan (RSP) from January 1, 2006 through December 31, 2008 (RSP Stipulation). Under the RSP, DP&L's fuel rate was fixed and included in the base retail generation rates.

On October 10, 2008, DP&L filed an application for a standard service offer (SSO) in the form of an electric security plan (ESP), pursuant to Section 4928.143, Revised Code. A stipulation (the ESP Stipulation), approved by the PUCO (the ESP Order), extended the DP&L rate plan through December 31, 2012 and allowed DP&L among other things to implement a by-passable fuel recovery rider to recover jurisdictional fuel and purchased power costs consistent with the provisions of Senate Bill 221. DP&L is required to make quarterly filings related to its fuel and purchase power costs and have its costs subject to an annual audit by an independent third-party or PUCO Staff.

Energy Ventures Analysis, Inc. ("EVA") and its subcontractor, Larkin & Associates PLLC ("Larkin"), were selected by the PUCO to perform the management/performance and financial¹ audits, respectively for up to two years. The initial audit covers the January through December 2010 period. The second audit will cover the period January through December 2011.

FUEL Rider Background

DP&L's fuel adjustment clause, the FUEL Rider, is the mechanism that is being used to recover DP&L's prudently incurred fuel and purchased power. The precise components of the FUEL Rider are not specified in either the ESP Stipulation or the ESP Order. DP&L has proposed the following FERC accounts for recovery in its FUEL Rider:

- Account 403 Depreciation Expense on Coal Handling Equipment
- Accounts 411.8 and 411.9 (Gains and Losses from Disposition of Allowance) the gains or losses from the sale of allowances.
- Account 421 Miscellaneous Non-Operating Income.
- Account 426 the realized loss on purchased power.
- Account 456 for gains and losses on coal sales and heating oil derivatives.

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¹ This part of the review has in prior reports been referred to as the "Financial Audit", a term which could be misleading because the work does not involve an audit of financial statements, but rather is an attestation engagement involving verification of DP&L's quarterly filings that is conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants, and using guidance set forth in former Chapter 4901:1-11 and related appendices of the Ohio Administrative Code relating to "Uniform Financial Audit Program Standards and Specifications for the Electric Fuel Component."

- Account 501 (Fuel) the cost of fuel and transportation for generating electricity.
- Account 509 (Allowances) the cost of emission allowances related to emissions of sulfur dioxide (SO₂) and nitrous oxide (NOx).
- Account 512 (Maintenance on Coal Handling Equipment)
- Account 547 (Non-Steam Fuel) the cost of fuel used in non-steam applications such as simple cycle gas peaking plants.
- Account 555 (Purchased Power) the cost of purchased electricity including both energy and demand or capacity charges.
- Account 565 transmission costs associated with certain purchased power. (No fuel-related charges were made from this account in calendar year 2010.)

Audit Of The FUEL Rider

This audit direction was to follow the general guidance provided for this work in former Appendix D and Appendix E to Chapter 4901:1-11, Ohio Administrative Code (O.A.C.). In addition, the initial audit should include the actual cost for the Rider FAC for the months January 1, 2010 through December 31, 2010. Such audit should follow the guidelines in Section L of Appendix D and Section M of Appendix E to former Chapter 4901:1-11, O.A.C.

Audit Approach

EVA and Larkin conducted this audit through a combination of document review, interrogatories, site visits and interviews. All of the data requests are provided in Attachment I. EVA and Larkin visited the Stuart power plant on February 23rd, 2011. EVA and/or Larkin conducted interviews with the individuals in the positions listed in Exhibit 1-1 during the week of February 21st, 2011. Several follow-up telephone discussions were conducted subsequent to the site interviews.

Exhibit 1-1 Interviews Conducted

Торіс	Department	Participants
Regulatory Operations	Regulatory Operations	
Accounting Relevant to Fuel Rider	Accounting	
Fuel Rider Accounting and Supporting Detail for	Accounting	
Reconciling Adjustments (RA); Audit Trail	Accounting	
Fuel Rider Projected Information	Financial Planning	
Commercial Operations	Fuel Procurement	
Forecast Data Provided to Financial Planning	Portfolio Analytics	
Internal Audit and Physical Coal Pile Inventory	Internal Audit	
Intergrated Resource Planning	Intergrated Resource Planning	
Generation; Plant Operations	Generation, Central Services Group	
Commercial Operations	Commercial Operations - Front Office	
Stuart Plant Visitation	Generation	
Commodity Risk Management/Counter-Party	Tracement	
Credit Approval/Denial Process	Treasury	
Accounting Follow-Up	Accounting	
Risk Management	Risk Management	
Environmental Issues	Environmental	
Coal Procurement Follow-Up	Fuel Procurement	
Regulatory Follow-Up	Regulatory Operations	

As this is the first audit of the FAC, there are no follow-up from prior audit directives.

Major Management Audit Findings

- DP&L owns all or part of eight coal-fired power plants which provide the vast majority of its generation. DP&L has the responsibility for coal procurement for the three coal plants it operates. The largest DP&L-operated station is Stuart which consists of four 600 MW units. The newest DP&L-operated station is Killen which consists of one 600 MW unit. The smallest and oldest station is Hutchings which consists of six units. In the last four years, all of the units at Stuart (2008) and the single unit at Killen (2007) have been retrofit with flue gas desulfurization equipment (FGD's or scrubbers). These retrofits have dramatically changed the fuel profile of these units as prior to the retrofits Stuart was limited to coals that could meet its 3.16 pound SO₂ per MMBtu emission limit and Killen was limited to coals which could meet its 1.2 pound SO₂ per MMBtu limit.
- 2. Prior to the retrofitting of the scrubbers, DP&L had been reliant on low sulfur and compliance coals from Central Appalachia, which were purchased through bilateral contracts, NYMEX contracts, and over-the counter trades of "NYMEX look-alike" coal. In recent years, DP&L has used NYMEX contracts for two purposes. NYMEX contracts are used to provide the physical supply of low sulfur coal. Additionally, NYMEX contracts are used as a financial hedge. DP&L sold its NYMEX contracts when it could purchase lower cost high sulfur or low sulfur coals. DP&L realized significant financial success related to these optimizations of its NYMEX contracts.
- 3. With the retrofitting of scrubbers, DP&L has sought to diversify its fuel supplies away from Central Appalachia although DP&L initially reported that it expected both Stuart and Killen to continue to rely on Central Appalachia for a portion of their requirements. After a large purchase of the coals coal, DP&L has focused its attention on purchasing coals to be burned in conjunction with the Central Appalachia coals due to the proximity, quality, and pricing of the **Central Coals**.

4. DP&L has been very successful in expanding the use of high sulfur coals above where it had anticipated it would be. DP&L is now reasonably confident that it can sustainably burn close to 100 percent high sulfur coal at Killen. At the Stuart Station, DP&L indicated that it believes it can burn a blend consisting of the subscription of the coal. DP&L is very aggressively trying to expand to even higher levels at Stuart and has been burning program, DP&L will decide whether it can further increase the percentage of high-sulfur

program, DP&L will decide whether it can further increase the percentage of high coals used at Units 1-3.

- 5. In 2009, DP&L entered into a stipulation that was subsequently approved by the PUCO that allowed DP&L to implement a bypassable FUEL Rider to recover retail fuel and purchased power costs, based upon least cost fuel and purchased power being allocated to retail customers. The fuel recovery rider was an alternative to the Company's initial request for a deferral account. The testimony filed by the Company related to the deferral account identified the specific FERC accounts that it sought recovery of through a deferral account. DP&L is now seeking recovery through the fuel rider of two additional accounts: Accounts 403 and 512.³ Neither of these accounts is being recovered by other utilities with fuel clauses. Nor are these accounts recovered by Ohio utilities including DP&L under the former Electric Fuel Component (EFC). EVA and Larkin were advised that the Staff believed the intent in the ESP Stipulation was for the FUEL Rider to provide recovery of the same fuel accounts as the EFC with one the exception of DP&L's coal sales' revenues. The ESP Stipulation specifically states that 25 percent of jurisdictional coal sales gains will be netted against the fuel and purchased power costs.
- 6. Optimizations are also not defined in either the ESP Stipulation or the Opinion and Order. In DP&L's Application of the Dayton Power and Light Company to Establish a FUEL Rider, DP&L states its "general (optimization) objective is to act on opportunities to reduce costs by transactions to optimize the fuel and purchased power portfolio and to reduce the risks of market price." DP&L also states "No optimization transaction will take place unless the net effect of the transaction results in a net decrease of costs to the retail ratepayer."
- 7. EVA basically agrees with DP&L's optimization description in its Application. EVA would describe it slightly differently by defining an optimization as a transaction that improves upon an existing position (that was acquired in a prudent manner for the expected requirement) to the benefit of both the utility and jurisdictional customers.
- 8. DP&L developed accounting processes to value the optimization. DP&L's calculations consist of three steps. Step one is the calculation of the gain/loss on the sale of the coal. Step two is the calculation of the optimization which compares the sale price to the replacement cost. Step three is the calculation of the impact on the FUEL Rider. DP&L argues that because step two, i.e., the calculation of the optimization, does not incorporate the initial cost of the coal being sold, the initial cost is not relevant. DP&L also does not consider what it could have acquired the high sulfur coal for at the time it purchased the hedge.

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³ The testimony of Gregory S. Campbell in Case No. 08-1094-EL-SSO identifies the FERC Accounts. The testimony of Teresa F. Marrinan confirms that Mr. Campbell has identified the requested FERC Accounts.

- 9. In 2010, DP&L purchased 7.7 million tons of coal at an average delivered price of \$56.40 per ton or 239.8 cents per MMBtu. DP&L's fuel costs are lower than its purchase costs because of sizable contract buy-out payments from one supplier and accounting gains. DP&L indicated that these amounts totaled **DPWE** and reduced the average delivered price by cents per MMBtu.
- 10. DP&L has the third highest fuel costs in the state of Ohio (out of seven utilities) based upon purchases and the fourth highest if the contract buy-out payments and accounting gains are included.
- 11. In 2010, DP&L entered into coal purchase agreements for high sulfur coal to be delivered in .

DP&L did not use a formal RFP process to purchase this coal. Rather DP&L purchased this high sulfur coals either through limited⁴ email and/or telephone solicitations or through direct negotiations with suppliers. This practice is consistent with DP&L's standard operating procedures, although inconsistent with leading industry practices. In prior years, DP&L had used formal RFP's for much of its non-NYMEX coal purchases.

- 12. In 2010, DP&L purchased **Contracts** tons of NYMEX contracts for delivery in **Contracts**. DP&L indicated it is using NYMEX contracts to hedge its coal requirements due to their liquidity. This is in addition to the NYMEX contracts DP&L already had in place for **Contracts**. With these commitments, DP&L has less than **Contract** of its expected high sulfur burn under contract for 2012 and more than **Contract** of its low sulfur burn under contract.
- 13. Purchasing NYMEX contracts when the expected requirement is for high sulfur coal is under almost any scenario likely to increase the cost of coal for jurisdictional customers. This is because the NYMEX price is higher than the price of high sulfur coal. Even if the NYMEX price appreciates at a rate greater than the price of high sulfur coal, the 75/25 split will not offset the price differential between the two products, making the price of high sulfur coal ultimately more expensive.
- 14. There is no separation between either the coal purchased for trading and jurisdictional load or the trading personnel and the personnel performing procurement for the regulated utility. In addition, one of several management goals for regulated utility fuel procurement personnel includes success in coal optimizations.
- 15. EVA questions DP&L's decision in 2010 to not exercise an option for up to the top to high sulfur for delivery in the and to purchase a similar amount of NYMEX contracts. DP&L indicated it believed that the coal was priced slightly above market, a position that EVA disputes. DP&L indicated that its rationale was related to its existing hedged positions. EVA's review indicates at the time of the option, DP&L only had tops tons of high sulfur coal under contract, an amount significantly below DP&L's expected high sulfur coal requirements in the probability. Further, DP&L purchased a similar amount of NYMEX future contracts at about the same time. DP&L stated that these NYMEX purchases are justified

⁴ The email distribution list does not include all Illinois Basin coal producers and does not include many other potential suppliers that are not located in the Illinois Basin.

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due to the combination of the uncertainty with the Company's projected burns and the high level of customer switching it has been experiencing.

16. This was the first PUCO-sponsored audit of DP&L's fuel procurement activities in a number of years. DP&L and EVA did not agree as to the scope of the audit which delayed production of some documents. DP&L was very responsive to supplemental data requests and provided an extremely thorough review of the draft report.

Management Audit Recommendations

- 17. The inclusion of Accounts 403 and 512 add approximately \$3.4 million dollars to the DP&L's FUEL Rider. These accounts were not included in the prior EFC and are not included in other Ohio utility fuel riders. EVA recommends that these costs be removed from the FUEL Rider. DP&L has further not demonstrated that these costs are incremental to blending.
- 18. DP&L should revise its standard operating procedures for coal procurement as follows:
 - Except for limited circumstances, all non-NYMEX coal purchases should be bought through competitive solicitations in which wide participation is encouraged.
 - DP&L should not limit potential coal sources to certain suppliers or supply regions.
 - The quality specifications for consideration and evaluation purposes should be widened and the economic evaluation should be used to discriminate between different qualities.
 - Coals should be considered alone and as part of blends, consistent with DP&L's capability to blend coal and any operational limitations.
 - The entire procurement process should be well documented and include a decision memorandum explaining the decision in the context of the RFP, DP&L's overall commitments, and the market in general.
- 19. EVA does not believe that DP&L has demonstrated that all of its optimizations have achieved a net decrease in costs to the retail ratepayer because its optimization analysis excludes the gain/loss on the sale and its optimization analysis does not consider what it could have acquired the high sulfur coal for if that coal had been purchased in the first place.
- 20. DP&L should develop clear policies that limit optimization sharing to those circumstances in which the optimization improves upon an existing position (that was acquired in a prudent manner) to the benefit of jurisdictional customers. This policy should require that any purchases of NYMEX futures should include an analysis of the cost of acquiring high sulfur coal or no coal as alternatives.
- 21. DP&L should develop a hedging strategy that considers the type of coal it expects to burn and the quantity of that coal. To that end, DP&L should not enter into NYMEX hedges that exceed its expected low sulfur coal requirements and DP&L should enter into high sulfur contracts that hedge in a consistent manner its expected high sulfur coal consumption.

- 22. To the extent that DP&L wants to continue trading, it should separate the trading personnel from the personnel dedicated to the procurement of jurisdictional coal to prevent a conflict of interest. The performance of personnel responsible for the procurement of jurisdictional coal should not be evaluated based upon their contributions to coal optimization margins.
- 23. DP&L should attempt to negotiate sulfur penalties into its new coal supply agreements and should include such penalties in its RFPs. The penalties should reflect the variable operating costs of the scrubbers per increase of 0.1 lb SO₂ per ton above "typical" specification, to be determined by DP&L.
- 24. DP&L should institute a development program for its coal procurement personnel. This program should include attendance at industry meetings and other activities that would expand their knowledge of coal basins, suppliers, and contracting practices.
- 25. EVA recommends that DP&L revise its procedures to establish a threshold at which a discrepancy in physical inventory would trigger a thorough investigation.
- 26. EVA recommends that DP&L incorporate inventory targets for each plant into in standard operating procedure for coal inventory.

Financial Audit Findings

- 1. In preparing its Fuel Rider sales forecasts for its quarterly Fuel Rider filings affecting 2010, DP&L reflected the impact of known customer supplier switching, but did not forecast additional customer supplier switching likely or expected to occur for the forecast periods.
- 2. For 2010, DP&L's FUEL Rider filings show a net undercollection of approximately \$14.9 million.
- 3. DP&L's Fuel Rider deferral (i.e., the 2010 undercollection) has been impacted by customer supplier switching that has occurred but which was not fully incorporated into DP&L's Fuel Rider sales and revenue forecasts.
- 4. DP&L does not estimate a prospective surcharge for FUEL Rider undercollections beyond the current ESP period, which runs through December 31, 2012.
- 5. DP&L has reasonable procedures in place to account for and collect plant fuel burn related information.
- 6. DP&L is appropriately accounting for the cost of demurrage as part of the transportation cost of delivering coal to the generating plants.
- 7. DP&L has provided reasonable explanations for the above average demurrage costs incurred in March 2010 and for how it weighs and evaluates the cost of incurring demurrage with other factors in managing its coal inventory and plant coal burn.
- 8. As described in the response to Onsite 37, DP&L has taken various actions in 2010 throughout the year in efforts to mitigate demurrage costs.
- 9. Larkin obtained and reviewed DP&L's confidential system stack information for a period before, during and after a significant unit outage at DP&L that occurred during the summer of 2010. Our review of such information was consistent with DP&L's representation that

resources are stacked such that DP&L's retail customers are assigned the least cost resources from DP&L's portfolio for that day.

10. The Company's rationale for including the Other Fuel Handling costs, as noted above, is that⁵:

This fuel handling activity allows the Company to manage the complexity of unloading, storing and blending the multiple fuel types that DP&L can now use. These costs are incurred to allow the Company to burn a wider range of fuels and to reduce the overall fuel cost to customers.

Subsequently, the Company provided the following statement:

"Senate Bill No. 221 permits the automatic recovery of prudently incurred costs, including "...the cost of fuel used to generate the electricity supplied under the offer...". This has been incorporated in Section 4928.143 of the Revised Code, which also includes other fuel related costs such as the cost of emission allowances and the cost of any future federally mandated carbon or energy taxes.

"The cost of coal used to generate the electricity supplied to DP&L's customers includes the purchase of the coal from the mine, its physical transportation to the power plant, unloading at the power plant and handling at the plant site until it enters the first boiler plant bunker, hopper, bucket, tank or holder of the boiler-house structure. The handling at the plant site is an integral part of the total cost of preparing the coal to be burned. It is impossible to burn the coal at the power plant to generate electricity for customers without incurring the handling cost to get it to the plant's boiler-house.

"At DP&L's Stuart and Killen Power Plants, the Company has added flue gas desulfurization equipment (scrubbers). In running the scrubbers, DP&L is mixing higher sulfur coal with lower sulfur coal to develop the blend of coal that best meets the scrubber requirements with the least cost to customers. As a result, DP&L has

"Coal handling at the plant site has three components per the Federal Energy Regulatory Commission's (FERC's) Uniform System of Accounts. These three components are operation of the equipment, which is recorded in FERC Account 510, Fuel; maintenance of the equipment, which is recorded in FERC Account 512, Maintenance of Boiler Plant; and FERC Account 403, Depreciation Expense. Please note that the FERC Uniform System of Accounts has been adopted by the Public Utility Commission of Ohio (PUCO) for utility reporting in Ohio.

"DP&L believes that it should be permitted to recover its total fuel cost needed to generate electricity for customers. This would include the complete cost of handling at the power plants to get the coal from where it is unloaded to where it is physically burned. The cost of the person operating the coal conveyor, the periodic maintenance of the coal conveyor and the depreciation of the coal conveyor, although recorded in different FERC accounts, are all integral parts of the process of generating the electricity delivered to customers."

⁵ See, e.g., DP&L's Application to Establish a FUEL Rider, at page 4.

- 11. When the concept for DP&L's FUEL Rider was established in the February 2, 2009 Stipulation and Recommendation in Case No. 08-1094-EL-SSO, the amount agreed upon by the parties for the initial rider (1.97 cents per kWh) was subtracted from DP&L's residual generation rates. The purpose of this subtraction was in concept to prevent a double recovery of the same costs by DP&L in both the FUEL rider and the residual generation rates. DP&L has provided no evidence or documentation showing that the Other Fuel Handing costs, recorded in Accounts 403 and 512, that DP&L seeks to include in the FUEL Rider were part of the reduction to residual generation rates.
- 12. Larkin reviewed the supporting documentation provided by DP&L, including the support relied upon by DP&L for the Depreciation Expense on fuel handling equipment in Account 403 provided in response to data request Onsite 5. As illustrative examples, the coal handing equipment identified for depreciation expense includes coal conveyers, coal crushers, coal dust eliminating equipment, coal hoppers, cranes, hoists and derricks, a magnetic separator and buildings, marine equipment, coal and lime barge unloading equipment, coal bunkers, silos and surge bins, coal chutes and gates, coal conveyers, station piping, conduit, pans and hangers, main power cable and bus, motor control center, switchboard, transformer, power station or substation, and supporting structures and substation equipment. It appears that the vast majority, if not all, of such fuel handling equipment would be needed at the plant, regardless of whether different types of coal were being blended.
- 13. Some of the fuel handling equipment data for which DP&L has included depreciation expense from co-owner operated plants, such as Conesville Unit 4 and Zimmer may be outdated. The listing of coal handling equipment for Conesville Unit 4 contains a note that states, among other things, that

The listings of Zimmer plant coal handing equipment

show

DP&L is using the data from earlier years to arrive at an estimated percentage of coal handing equipment compared to the total FERC 300 level plant investment. DP&L multiplies these estimated percentages times the January 31, 2010 plant balances by FERC 300 level account to arrive at an estimate of the amount of the 300 level plant associated with coal handling. DP&L did not claim depreciation on coal handling on the Beckjord, East Bend and Miami Fort Plants due to the lack of historical records.

- 14. DP&L has not identified specific or incremental coal handling equipment cost that is used to blend multiple fuel types. Finally, we do not believe that DP&L has established that "these costs are incurred to allow the Company to burn a wider range of fuels and to reduce the overall fuel cost to customers." In summary, based on our review, DP&L's rationale for including the coal handling costs does not appear to withstand scrutiny.
- 15. Larkin reviewed DP&L's audit trail for Fuel Rider includable costs, focusing on the test month of July 2010 and is also selectively verifying actual cost contained in DP&L's Reconciliation Adjustments (RAs) to supporting documentation. We conclude that DP&L has maintained adequate audit trail documentation for 2010.

- 16. We conclude that DP&L maintains an appropriate audit trail for its Reconciliation adjustments, subject to some specific concerns articulated in other sections of this chapter.
- 17. DP&L applies system optimization by initially recording 100% of jurisdictional net accounting gains to be included in the Fuel Rider and then charges 75% of the jurisdictional share of optimization benefits back to the Fuel Rider. The remaining 25% of the jurisdictional share of gains and losses associated with coal sales, net of replacement coal costs are credited to retail customers.
- 18. The Company engaged in ten coal optimization transactions during 2010. These transactions are designated as Optimizations A through J per the response to LA-2010-44. Documentation for each optimization transaction was provided in LA-2010-44, including explanations and estimates of the value of each optimization as well as the associated accounting documentation.
- 19. DP&L's charge to fuel costs for optimizations sharing (before application of monthly retail jurisdictional ratios) totaled **Example**. A true-up of \$28,901 was included in December 2010, the jurisdictional share of which should be allocated based on the appropriate monthly allocators for the months across which the true-up is properly assigned. DP&L has maintained detailed audit trail documentation for its 2010 charges and credits to the Fuel Rider for its 2010 optimization trades.
- 20. Optimizations **example** occurred at specific dates during 2010 and the transactions related to Optimization **occurred** in various years, affecting deliveries scheduled for calendar year 2010.
- 21. DP&L intends to make a correction of \$(40,185) to true-up optimization trades. DP&L will be recording the \$(40,185) in April 2011. Larkin independently calculated that correction and confirmed the amount.
- 22. To allocate the emission allowance sales gains and losses to the Fuel Rider, DP&L used an 80/10/10 ratio, where 80% is the Retail Allocation Factor; 10% is the DPLER Allocation Factor; and the remaining 10% is the Wholesale Allocation Factor. This allocation process was used from January 2010 through July 2010. Beginning August 2010 and forward, DP&L uses a new factor. This new factor, which is updated monthly, uses the cumulative calendar MWh sales for these three groups of customers to allocate the gains or losses of emission sales in each month. The mid-period change in the allocation ratio as applied by DP&L resulted in shifting the allocation of net EA sales gains and increasing retail fuel cost by approximately \$5,600.
- 23. Larkin reviewed a sampling of customer billing information to test whether DP&L had accurately applied the FUEL Rider rates. No exceptions were noted after applying the secondary service fuel rate to private outdoor lighting and after accounting for voltage adjustments, which are provided for in DP&L's tariffs.
- 24. LA-2010-37 asked the Company to provide the following information: "For purchases of power recorded in July 2010 that are included in the FAC, please provide the related invoices, and paid cash voucher or cash payment receipt". The Company provided (1) copies of invoices for July 2010, (2) "Available Power Statements" from Ohio Valley Electric Corporation ("OVEC"), and (3) PJM weekly invoices and billing detail. Larkin attempted to

trace the amounts from the July 2010 power purchase documentation provided to DP&L's general ledger and the Fuel Recovery 2010 Oracle Report (provided in LA-2010-58&59), but was initially unable to tie out any of the amounts from the documentation provided in LA-2010-37. In response to our inquiry regarding this issue, DP&L provided supplemental support for the invoices and OVEC Available Power Statements from which Larkin was able to trace the amounts from those documents to the general ledger and/or the RA workpapers. In addition, the Company provided a narrative which described the process for allocating PJM costs to the Fuel Rider.

Financial Audit Recommendations

- 25. To improve the accuracy of its forecast Fuel Rider rates and to minimize undercollection build-up related to customers who leave DP&L's retail service for an alternative supplier, DP&L should incorporate its best estimates of the impacts of ongoing customer supplier switching into its Fuel Rider kWh sales forecasts.
- 26. The Company should prepare explanations of differences between forecast and actual FUEL Rider revenues, and between forecast and actual FUEL Rider costs. Understanding why differences have occurred may lead to improvements in the accuracy of future forecasts.
- 27. DP&L's reflection of corrections for optimization trades in its calculations should be done in a manner that recognizes the retail Fuel Rider ratios that were applicable in the months in which DP&L had originally reflected such optimization costs.
- 28. DP&L should update the ratio used to allocate emission allowance sales gains and losses annually. The annual update is necessary to reflect the impact of retail customer switching to other generation suppliers, and to reflect other changes.
- 29. In the next audit period, the Company should provide a better audit trail for tracing its purchased power costs from vendor invoices to the general ledger and Fuel Recovery 2010 Oracle Report. This recommendation pertains primarily to the audit trail related to the allocation of the PJM power costs to the Fuel Rider.
- 30. An internal audit should be conducted to specifically review the Fuel Rider processes and calculations.

Audit Outline

The outline of the remainder of this audit report is as follows:

- Section 2 DP&L Background
- Section 3 Fuel Procurement Audit
- Section 4 Coal Optimization
- Section 5 Performance Audit
- Section 6 Financial Audit
- Attachment I Data Requests
- Attachment II Coal Supply Region Map

2 DP&L BACKGROUND

Overview

DP&L is a wholly-owned subsidiary of DPL Inc., a diversified regional energy company organized in 1985 under the laws of Ohio. DP&L is a public utility incorporated in 1911 under the laws of Ohio. DP&L is engaged in generation, transmission, distribution and the sale of electricity to residential, commercial, industrial and governmental customers.

DP&L wholly and commonly owns 12 power generating facilities with a total capacity of 3,251 megawatts (2,827 MW of coal and 967 MW of other capacity). Exhibit 2-1 lists the facilities; Exhibit 2-2 displays their locations.

Exhibit 2-1	
DP&L Wholly- and Commonly-Owned Power Generation Fa	cilities

			Operating		DP&L	Total
Туре	Station	Ownership	Company	Location	(MW)	(MŴ)
Coal	Hutchings	100%	DP&L	Miamisburg, OH	365.0	365.0
	Killen	67%	DP&L	Wrightsville, OH	402.0	600.0
	Stuart	35%	DP&L	Aberdeen, OH	808.0	2,308.0
	Conesville 4	17%	CSP	Conesville, OH	129.0	780.0
	Beckjord 6	50%	DEO	New Richmond, OH	207.0	414.0
	Miami Fort 7&8	36%	DEO	North Bend, OH	368.0	1,020.0
	East Bend	31%	DEK	Rabbit Hash, KY	186.0	600.0
	Zimmer	28%	DEO	Moscow, OH	365.0	1,300.0
	TOTAL Coal	TAL Coal				
Other	Hutchings	100%	DP&L	Miamisburg, OH	25.0	25.0
or Diesel	Yankee Street	100%	DP&L	Centerville, OH	101.0	101.0
	Monument	100%	DP&L	Dayton, OH	12.0	12.0
	Tait Diesel	100%	DP&L	Dayton, OH	10.0	10.0
	Sidney	100%	DP&L	Sidney, OH	12.0	.12.0
	Tait 1-3	100%	DP&L	Moraine, OH	256.0	256.0
	Killen	67%	DP&L	Wrightsville, OH	12.0	17.9
	Stuart	35%	DP&L	Aberdeen, OH	3.0	8.6
	Yankee Solar	100%	DP&L	Centerville, OH	1.0	1.0
	TOTAL Other				432.0	443.5
TOTAL					3,262.0	7,830.5

Exhibit 2-2 Location of DP&L Power Generation Facilities⁶



DP&L belongs to the regional transmission organization PJM Interconnection (PJM) which is part of the Eastern Interconnection grid operating an electric transmission system serving all or parts of Delaware, Illinois, Indiana, Kentucky, Maryland, Michigan, New Jersey, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia and the District of Columbia. Among the primary purposes of PJM are to dispatch electric generating plants on a lowest cost basis, thereby reducing the electric costs for all members of the pool, to coordinate regional planning to ensure reliability to the region in which it operates, and to operate markets for capacity, energy, demand response products and ancillary services. Exhibit 2-3 provides a map of PJM.

Exhibit 2-3 PJM Interconnection Zones



⁶ Note Montpelier is not a DP&L facility.

DP&L's share of generation by plant in 2010 is summarized in Exhibit 2-4. About 48 percent of its coal-fired generation comes from DP&L-operated plants.

Plant				en sen en sen sin No sen en sen sin sin	and and the second s
Conesville 4	362,768				362,768
East Bend	1,400,237				1,400,237
Frank M Tait CT 1-3		26,597			26,597
Frank M Tait IC			24		24
J.M. Stuart	4,828,769				4,828,769
J.M. Stuart IC			74		74
Killen CT			518		518
Killen	2,763,149				2,763,149
Miami Fort 7, 8	2,749,380				2,749,380
Monument IC			25		25
O.H. Hutchings	176,715				176,715
O.H. Hutchings CT		65			65
Sidney IC			44		44
W.H. Zimmer	2,763,218				2,763,218
W.C. Beckjord 6	1,019,220				1,019,220
Yankee CT		223			223
Yankee Solar				997	997
Total	16,063,456	26,885	685	997	16,092,023

Exhibit 2-4 Generation by Plant, 2010 (MWH)

Coal Plants

This section provides background information on the three coal plants operated by DP&L.

J. M. Stuart

The Stuart station consists of four units with a total generating capacity of 2,308 MW. The retrofits of flue gas desulfurization units on all four units were completed in 2008. As can be seen in Exhibit 2-5, the four units now share a common stack. All coal to this station is delivered by barge.

Exhibit 2-5 Aerial View of Stuart Plant



Recent plant operating statistics are provided in Exhibit 2-6. Generation in 2010 was depressed compared to the other years due to an extended unit outage in September. This is DP&L's largest station, consistently burning more than six million tons per year.

Utility	Plant	Units	Location	Ownership %	Total	DPL Share
Dayton P&L	J.M. Stuart	1-4	Aberdeen, OH	35%	2,308	808
	2010		2009	2008		2007
Generation (MWh)	13,460,466		15,324,026	14,039,493		15,105,436
Consumption (tons,	brl)					
Coal	5,931,182		6,749,846	6,141,771		6,384,537
Oil	76,822		55,542	54,533		45,024
Capacity Factor	66.3%		75.5%	69.2%		74.4%
Heat Rate (Btu/kWh	ı) 9,951		9,800	9,798		9,489

Exhibit 2-6 J.M. Stuart Operating Statistics

Prior to the retrofitting of the scrubbers, the Stuart station burned low sulfur coal in order to meet its 3.16 pound of SO₂ per MMBtu SIP⁷ limit. The coal originated primarily in Central Appalachia. The retrofit of the scrubbers has allowed higher sulfur coal. The scrubbers are designed for coals with an SO₂ content up to pounds per MMBtu.⁸ However, given the design of the boilers, DP&L did not assume a

.9 Over time, DP&L has become more optimistic about

⁷ State Implementation Plan

⁸ Onsite 20

increasing the Illinois Basin percentage. In DP&L's first quarter 2010 analyst call, CEO Barbas noted that DP&L is "really encouraged with the blending (it has) been able to do at the stations. When (DP&L) first started the process, (it was) hoping to be able to burn about 50% Illinois basin at Killen and 25% at Stuart. (DP&L is) now burning up to 100% at Killen, (it has) actually burnt 100% (in one) of the boilers at Stuart and (is) pleased with the outcome."



Killen

The Killen station consists of one 600 MW coal-fired power plant. The station was designed for two units, but only one unit (Killen 2) was built. The unit was subject to the original New Source Performance Standard of 1.2 pounds SO_2 per MMBtu which the utility chose to comply with through the use of low sulfur compliance coal. A scrubber was retrofit on the Killen station in 2007. An aerial view of the plant is provided in Exhibit 2-8. All of the coal consumed by Killen is delivered by barge.

Exhibit 2-8 Aerial View of KIllen Plant



Recent plant operating statistics are provided in Exhibit 2-9. In three of the last four years, this plant operated at plus 75 percent capacity factors. Coal burn is typically about 1.8 million tons per year.

Exhibit 2-9

Historical Operational Statistics for Killen

Utility	Plant	Unit	Location	Ownership %	Total	DPL Share
Dayton P&L	Killen	2	Wrightsville, OH	67%	600	402
	2010		2009	2008		2007
eneration (MWh) 4,053,497			4,268,829	3,516,020		4,093,099
Consumption (tons,brl)						
Coal	1,811,732		1,864,977	1,598,897		1,747,138
Oil	16,780		19,447	32,491		14,674
Capacity Factor	74.9%		78.9%	64.9%		75.6%
Heat Rate (Btu/kWh)	10.297		9.787	10.223		9,869

In early 2008, CEO Barbas stated in the fourth quarter 2007 analyst call, that "DP&L (had) verified (its) ability to burn 100% Northern Appalachian coal which has about 4 pound sulfur¹⁰ content. Currently (DP&L was) finishing up tests of 4 to 5 pound sulfur coal from the Illinois Basin, blended with 1.7 to 2 pound sulfur coals from Central Appalachia. (DP&L has) successfully tested a 50-50 blend and (is) now testing a blend of 2/3rd Illinois Basin coal." By

¹⁰ Mr. Barbas presumably meant SO₂ not sulfur.

September 2008, DP&L had established a target of a blend with 75 percent Illinois Basin coal.¹¹ As noted above, by 2010 DP&L had determined it could burn 100 percent Illinois Basin coal.

DP&L received permission for testing of biomass at Killen and did conduct some testing in 2010. DP&L received a final permit from the Ohio EPA in December 2010 which allows DP&L to burn up to five percent biomass at Killen.¹² DP&L indicated that it had been for the second second

biomass permit was appealed by a coalition of environmental groups in January 2011.

O.H. Hutchings

DP&L's smallest station is the Hutchings 365 MW power plant which consists of six small units. An aerial view is provided in Exhibit 2-10. This plant receives coal by truck or rail. The plant has not been retrofitted with scrubbers and there are no plans for them.

Exhibit 2-10 O.H. Hutchings Plant



Recent plant operating statistics are provided in Exhibit 2-11. The plant operates at very low levels due to its high cost.

The

¹¹ September 23-24, 2008, Merrill Lynch Power & Gas Leaders Conference, Paul M. Barbas, President and CEO ¹² If DP&L burns biomass at Killen, the "price" will be allocated between the FUEL Rider and the rider that provides recovery of REC expense.

Exhibit 2-11 Historical Operating Statistics at O.H. Hutchings

Utility	Plant	Units	Location	Ownership %	Total	DPL Share
Dayton P&L	O.H. Hutchings	1-6	Miamisburg, OH	100%	365	365
200228 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2010		2009	2008	1	2007
Generation (MM	Vh) 170,961		91,477	374,407	like states	626,306
Consumption (to	ons,mcf)	Sec. 600	and the second second		New Alternation	
Coal	94,264		50,479	191,077		308,004
Natural Gas	102,907	1. 2. 100 V 2. 100 V	77,851	188,147	nun un anten un anten di Mir che	216,060
Capacity Factor	5.0%	1. M. H	2.7%	11:0%*	and the second second	18.4%
Heat Rate (Btu/I	kWh) 14,398		14,526**********		an a	12,603+

Hutchings has burned less than 100,000 tons per year in the last two years. All of the coal burned by Hutchings is low sulfur Central Appalachia coal.

3 FUEL PROCUREMENT AUDIT

Overview

In 2010, DP&L purchased 7.7 million tons of coal at an average delivered price of \$56.40 per ton or 239.8 cents per MMBtu. (Exhibit 3-1) According to DP&L's classification, only four percent of purchases were on a spot basis. All of the coal purchased for Hutchings was classified as spot. The remaining spot coal was mostly NYMEX coal purchased for Stuart. The average delivered price for coal purchased for Killen was substantially below the coal purchased for Stuart and Hutchings due to the ability to use a full diet of high sulfur coal.

Exhibit 3-1 DP&L Coal Purchases, 2010

				Spot			Total								
			Sulfur	-	đ			Sulfur		¢			Sulfur		a a
	Tons	Btu/lb_	(%)	\$/Ton	MMBtu	Tons	Btu/ib	(%)	\$/Ton	MMBtu	Tons	Btu/lb	(%)	\$/Ton	MMBtu
Hutchings	-	-	•		-	60,260	12,562	0.78	77.63	309.0	60,260	12,562	0.78	77.63	309.0
Killen	1,698,611	11,938	2.72	50.00	209.4	6,980	11,933	1.86	62.34	261.2	1,705,591	11,938	2.71	50.06	209.7
Stuart	5,727,903	11,692	1.84	57.95	247.8	236,053	11,929	1.01	59.32	248.6	5,963,956	11,701	1.81	58.01	247.9
TOTAL	7,426,514	11,748	2.04	56.13	238.9	303,293	12.055	0.99	63.03	261.4	7,729,807	11,760	2.00	56.40	239.8

Source: Onsite 23

DP&L's fuel costs are lower than its purchase costs because of sizable contract buy-out payments from one supplier and accounting gains. DP&L indicated that these amounts totaled and reduced the average delivered price by the per MMBtu.

Using EIA 923 data, DP&L's delivered coal costs on a dollars per MMBtu basis are compared to other Ohio utilities in Exhibit 3-2. DP&L had the third highest delivered costs of the seven utilities. Exhibit 3-3 provides some additional details about each utility's purchases. Some of the differences are explained by location, legacy contracts, the average quality of the purchases, and the contract/spot mix.

As noted above, DP&L purchases do not reflect the buy-down amounts and/or accounting gains. The adjustment would improve DP&L's rank by one. Other utilities may also have buy-down adjustments which are not included.



Exhibit 3-2 Ohio Utility Coal Purchase Costs, 2010 (\$/MMBtu)

Source: EIA Form 923

Exhibit 3-3 Ohio Utility Coal Purchase Details

	Contract					Spot					Total					Contract
	Tons	\$/Ton	\$/MMBtu	Btu/lb	S(%)	Tons	\$/Ton	\$/MMBtu	Btu/lb	S(%)	Tons	\$/Ton	\$/MMBtu	Btu/lb	S(%)	%
Columbus Southern Power	3,215	50.91	2.26	11,255	3.21	-	-	-	-	-	3,215	50.91	2.26	11,255	3.21	100%
Dayton Power & Light	7,424	56.19	2.39	11,760	2.04	303	63.05	2.61	12,058	0.99	7,728	56.46	2.40	11,772	2.00	96%
Duke Energy Ohio	5,545	48.38	2.03	11,930	3.27	3,528	56.99	2.32	12,303	3.13	9,073	51.73	2.14	12,075	3.21	61%
FirstEnergy	5,633	58.19	2.45	11,889	1.50	4,742	44.06	2.43	9,074	0.39	10,375	51.73	2.44	10,602	0.99	54%
Ohio Power (incl. Cardinal)	13,212	45.56	1.89	12,055	2.91	1,336	36.10	1.84	9,793	0.57	14,548	44.69	1.89	11,847	2.69	91%
Ohio Valley Electric	2,879	44.04	2.13	10,351	1.95	16	55.09	3.11	8,859	0.34	2,894	44.10	2.13	10,343	1.94	99%
Orion Power	1,009	63.26	2.44	12,988	1.85	91	60.09	2.37	12,653	2.51	1,101	63.00	2.43	12,960	1.91	92%

SOURCE: EIA Form 923

Background on DP&L's Coal Supply

The retrofitting of scrubbers on Killen and Stuart has dramatically changed the type of coal purchased by the utility over a relatively short period of time. As shown in Exhibit 3-4, DP&L purchased almost exclusively Central Appalachia coal in 2007. By 2010, only 35 percent of coal purchases were from Central Appalachia. As noted above, DP&L is working to reduce that amount further. A map of U.S. coal supply regions is provided in Attachment II.

The primary reason for DP&L to reduce its purchases of Central Appalachia coal is that the market price for Central Appalachia coal is much higher than the market price for higher sulfur coals as show in Exhibit 3-5. This exhibit, which displays published prompt coal prices (which are effectively spot coal prices) shows that Central Appalachia coal is almost always more expensive than high sulfur coal alternatives.¹³

¹³ DP&L requested that EVA note that these coals are not exactly the same as the coals it purchases.

There is no

index for a pound coal in either Northern Appalachia or the Illinois Basin. In addition, DP&L purchases NYMEX, not CSX rail coal. The purpose of this exhibit is to show the historic relationship between high sulfur coal.



Exhibit 3-4 DP&L Coal Purchases by Supply Region (1,000 Tons)

The reason for the price differential is not simply quality. The reason is that mine production costs in both Northern Appalachia and the Illinois Basin are substantially below mine production costs in Central Appalachia. In order for the Central Appalachian supply to be sustained, producers need prices over \$60 per ton.¹⁴ Therefore, the domestic utility demand for Central Appalachia coal comes primarily from utilities that either need the quality Central Appalachia has to offer or have a transportation advantage from Central Appalachia.

Exhibit 3-5 Historical Prompt Coal Prices (\$/Ton)



from the Illinois Basin and Northern Appalachia and Central Appalachia coal as an explanation as to why DP&L is seeking to minimize its use of Central Appalachian coals. ¹⁴ EVA, U.S. Quarterly Coal Financial Report, Q1 2010.

Source: Form 423/923

In recognition of the price differential, DP&L is working to limit its consumption of high cost Central Appalachian coals at Killen and Stuart. According to CEO Barbas, the initial plan when the decision to retrofit scrubbers on Killen and Stuart was made was to burn a blend a consisting of 50 percent Illinois Basin coal at Killen and a blend consisting of 25 percent Illinois Basin coal at Stuart. By September 2008, DP&L was representing that its target blend for 75/25 Illinois Basin/Central Appalachia for Killen and 50/50 for Stuart.¹⁵ Since that time, DP&L has all but eliminated Central Appalachian coal at Killen and is well below 50 percent Central Appalachian coal at Stuart.¹⁶



The current coal specifications provided to EVA are shown in Exhibit 3-6 for Killen and Stuart and Exhibit 3-7 for Hutchings. The testing that has occurred since the retrofit of the scrubbers suggests that the coal specifications for Killen and Stuart should be updated.

Exhibit 3-6 Killen and Stuart Coal Specifications



¹⁶ Q1 2010 Analyst Call "We are now burning up to 100 (sic) at Killen."

¹⁵ Merrill Lynch, Power & Gas Leaders Conference, Paul M. Barbas, President and Chief Executive Offer, September 23-24, 2008.

Exhibit 3-7 Hutchings Coal Specifications



As a rule, coal specifications should be as broad as possible to encourage the most competition, particularly when they are being used to eliminate coals from consideration as DP&L does. The economic analysis of the bids should include the quality evaluations.

Management and Organization

The primary responsibility for fuel procurement within DP&L falls under Operations, as shown in Exhibit 3-8.





The organization of the fuel procurement team is provided in Exhibit 3-9. The fuel procurement team is responsible for procurement of commodities and transportation services for the fossil fuel generating stations operated by the Company. The functions performed by this group encompass the following:

- planning and budgeting functions,
- solicitation and evaluation of proposals for fuel and transportation contracts,
- selection and qualification of suppliers and shippers,
- contract negotiation,
- administration and enforcement, and
- operations support.

This team has a stated goal of creating value for DP&L's customers and shareholders by contracting and delivering commodities that are compatible with the company's equipment and achieving the reliability of supply at the most economical value per megawatt hour generated.

Exhibit 3-9 Fuel Procurement Team



After several years where a Vice President worked directly with the account manager and others to procure coal, the Fuel Procurement Team was reorganized and Aaron Cooper joined the Fuel Procurement Team about four years ago. Mr. Cooper has been with DP&L for 21 years, which includes 15 years of commercial work including negotiations and contract administration with major accounts. Prior to joining the Fuel Procurement Team, however, he had no prior coal procurement experience. His staff includes an account manager with over 15 years experience in coal procurement and contract administration and he reports to Dave Crusey who has over 15 years of experience in commodity trading.
Policies and Procedures

DP&L has documented its fuel procurement policies and procedures in what it referred to as its Standard Operating Procedures or SOP's. There are seven separate SOP's related to fuel. These SOP's, listed below, are very detailed.

- Coal and Limestone Procurement
- Coal, Limestone, Fuel Oil, Gypsum Scheduling
- Coal Quality Control
- Coal Supply Chain Disruption
- Coal Inventory
- Fuel Oil Inventory and Quality Control
- Fuel Consumption Estimate and Position Management

Most of the SOP's have either been recently updated or are in the process of being so. Multiple parties are required to approve each SOP; the parties vary based upon the scope of the SOP.

Coal and Limestone Procurement SOP

The Coal and Limestone Procurement SOP is organized as follows:

Section	Description
Introduction	Purpose and explanation
Description of Policies and Procedures	1. Steps to determine need
	2. Steps to define quality of purchase
	3. Proposal solicitation/evaluation/ procurement
	4. Non-RFP, spot and NYMEX purchases

From EVA's observation, DP&L generally complies with its own procedures. EVA, however, has issues with the procedures. The primary issue relates to how the procurement is done.

In 2010, DP&L did not conduct a formal RFP process yet entered into contracts for deliveries beginning in DP&L describes the solicitation as follows:



The direct email solicitation was made on April 30, 2010 to **suppliers**. DP&L provided a summary of its **bids** (Exhibit 3-10). EVA has a number of concerns about the use of

Exhibit 3-10



While all suppliers offered bids, the lowest cost bid was eliminated for quality reasons,

through the evaluation process.¹⁸ Given this coal was \$0.13 per MMBtu lower in cost, it would have been appropriate to further evaluate, rather than exclude. Further and more importantly, DP&L had a large open position at that time. A test of the coal from that supplier would not only allow a lower cost option but would also create additional competition for future bids.



Given the lack of other bids, EVA looked to contemporaneous contracts to determine whether these purchases were at market. EVA identified five contracts that were executed at a similar time.¹⁹ These contracts include coals similar to what DP&L purchased. The terms of the five contracts are summarized in Exhibit 3-11. Two of the contracts had four different quality specifications. Only the pricing for the quality closest to the

¹⁸ The **Sector** in particular is inappropriate since both Killen and Stuart have historically burned

¹⁹ Without access to each utility's books and records it is impossible to know the exact timing of the pricing

contracts is included on this exhibit. All of these contracts were lower in price than the DP&L purchases.

_					-		-		Quality	
		Contract								
Utility	Supplier	Date		Tons	\$/Ton	FOB	Source	Btu/ib	SO2 (lb/MMBtu)	Ash (lb/MMBtu)
Big River Electric	Armstrong	7/30/2010	2011	250,000	43.75	MP 76.6 Green River	Parkway Mine	11,200 min	4.4-6.0	8.48 max
·			2012	500,000	45.99	MP 76.6 Green River				
Big Rivers Electric	Alliance	7/7/2010	2011	600,000	51.65	Deliverd	Quality B	12,000 min	5.2 max	8.0 max
			2012	750,000	53.97	to Sebree			1	
			2013	750,000	56.40	Plant			-	
Big Rivers Electric	Allied Resources	6/18/2010	2011	250,000	49.93	MP 45.6 Green River	Quality A	11,850 min	4.94 max	8.32 max
			2012	750,000	51.96		1		:	
			2013	750,000	54.32					
			2014	750,000	57.07				;	
			2015	750,000	61.05					
EKPC	Peabody	7/7/2010	2011	180,000	45.45	OR MP 772.5	Somerville	11,000 min	6.00 max	10% max
			2012	360,000	46.95				:	
			2013	360,000	48.45					
ЕКРС	American Coal	9/13/2010	2011	120,000	46.18	OR MP 896	Galatia	11,800 min	4.5	9% max
{			2012	360,000	47.57			ļ		
			2013	360,000	49.00			ļ		

Exhibit 3-11 Contemporaneous Contracts

The most direct comparison is between the **contract and the contract and the contract and the contract and the contract and the DP&L** price was **contract and the contract and t**

Given limited information about exact timing etc., this comparison may not be dispositive, yet it certainly raises the possibility that suppliers are not as aggressive when dealing in a limited competitive situation. Even more importantly, DP&L cannot demonstrate to any degree of certainty otherwise.²⁰

A more formal and broader solicitation through an RFP process provides more opportunities to procure coal at the lowest reasonable costs.²¹ An RFP process may also promote a more rigorous approach to evaluating bids. It also enhances the ability of outside auditors, Staff and the PUCO to examine a utility's decision-making process and the end-results of that process.

EVA recommends that DP&L immediately incorporate a formal RFP into its procurement process for all of its non-NYMEX coal supply. In addition to an RFP package, this includes a wide distribution list including all producers/traders operating not just in the Illinois Basin but Northern Appalachia as well, disclosure to the marketplace that a solicitation is underway, and a process which insures bids are controlled upon receipt.²² Disclosures are generally achieved through a brief announcement to the coal periodicals that a solicitation is being conducted. The

²⁰ Another issue is concerns about the vast dollars involved in these decisions. Without an antiseptic process that minimizes phone and email submission of bids, it is difficult to demonstrate adequate controls.

²¹ In prior years, DP&L had greater use of RFP's. A very successful procurement in 2007 was the result of such a competitive RFP.

²² There are two appropriate exceptions to conducting a formal RFP. In an emergency, coal may need to be acquired more quickly than an RFP would allow. Also, if coal is offered at clearly distressed prices, the utility should be allowed to take advantage of the situation. The reasons for any non-REP purchases must be well documented.

process would also include an economic evaluation of all coals with a well documented summary of the bid process and the recommended actions.

EVA recognizes that many of the potential sources of supply that DP&L will consider have not been tested at Killen and/or Stuart. As a result, as part of its efforts to increase the competitiveness of the supply, DP&L should develop a testing program and require any new contract to be subject to a successful test burn. EVA has seen many procurements that are subject to successful test burns.

A second concern in the solicitation process is the decision to not consider coals that do not meet DP&L's "boxed specifications". Some of the bids in 2010 were not considered for 2011 because the quality was slightly outside of the boxed specifications. DP&L should look to have as broad specifications as possible and then discriminate in the economic evaluation. For example, if the boiler can handle 16 percent ash but the plant prefers 12 percent ash, the solicitation should allow for bids up to 16 percent and the evaluation should apply a factor that reflects the additional cost associated with the higher ash.

DP&L should also consider some of these "off-spec" coals if the approximate methods used to blend coals at Stuart and Killen could reliably achieve a blend of coals that also blends characteristics such that they could meet the boxed specifications.

A third concern in the procurement process is the contract terms that DP&L has been negotiating. There are two areas that would improve the quality of the agreements. The first has to do with volume optionality; the second with quality adjustments. Volume optionality is when a buyer has the right to vary the base tonnages under a contract. For example, if the annual tonnage is stated as 1.0 million tons plus or minus 15 percent, the buyer has the right to take anywhere between 850,000 and 1,150,000 tons per year subject to compliance with notice requirements. While options were standard at one time in the industry, they have become harder to acquire in recent years. However, some producers will agree to them²³ and they provide enormous value in addressing variable burns. In fact, DP&L had volume options in **Second School** of its coal supply agreements.

The only way to insure that optionality will not be available is to not ask for it in the RFP process. It appears that DP&L has not asked for it so it is unknown whether it could have been acquired or at what cost. Typically, in a procurement process, the option value will be considered in the evaluation process through the use of a Black Scholes model.

The second area in the contract terms relates to the quality adjustments, particularly the SO₂ adjustment.

25	26	
²³ Vectren South has a plus or minus	15 percent optionality in four contracts with Vectren Fuels	3.
24		
25		
26		In a high efficiency
scrubber given current and expected	emission allowance prices, this is largely irrelevant	

Other utilities have worked very hard to align the sulfur penalty to the variable operating costs of the scrubber. For example, AEPSC's fuel procurement group initiated an internal audit on this very topic.²⁷ Similarly, Duke Energy Kentucky makes clear in its Master Agreements with suppliers that if the SO₂ exceeds the guarantee, it will adjust the price based upon the actual cost of scrubbing which is included in each purchase order. Duke Energy Kentucky provides no premiums if the SO₂ is lower than the guarantee. Careful attention should be paid to crafting penalties for all qualities of concern that keep the utility whole in the event that the SO₂ content purchased is not delivered.

Finally, DP&L does not appear to embrace another component of a procurement strategy which is also considered to be the leading industry practice which is a portfolio strategy in which the contracts have

Coal Inventory SOP

The Coal Inventory SOP provides DP&L's explains the responsibilities for inventory management, the basis for the establishment of inventory minimums, the inventory minimums, and the tons constituting the base inventory levels. DP&L has established a "normal minimum" of 30 days at each station. The days are based upon the operating inventory (i.e., the inventory exclusive of the base) divided by the full burn rate. DP&L does not include a target inventory level for each station in its SOP.

An inventory of coal is maintained to manage fluctuations in fuel consumption and delivery. Common causes of fluctuations in inventory are:

- Seasonal Variation in burn
- Planned/Unplanned maintenance
- Delivery schedule based on seasonal and supplier variation
- Lock and unloader outages
- Overall supply conditions in the market

Two groups oversee inventory decisions; one group establishes inventory goals while the other approves them. The membership of each group is as follows:

²⁷ Redacted Report of the Management/Performance and Financial Audits of the FAC of the Columbus Southern Power Company and the Ohio Power Company, May 14, 2010, S02 Cost Recovery Adjustments Review (Issued May 29, 2009).

Establish Inventory Goals

- Managing Dir., Commercial Operations
- Plant Mangers
- CD/CCD co-owners (if applicable)

Stuart Coal Inventory

Stuart is a base-load plant that historically has run at high capacity factors throughout the year. DP&L indicated that it believes

Inventory performance in 2010 is summarized on Exhibit 3-12. Stuart's actually inventory days are compared to both the minimum inventory levels and to average inventory levels for coal plants in PJM. Stuart's inventory levels were significantly above its stated minimum and for most of the year were significantly above the inventory levels for the other coal-fired plants in PJM.



Killen Coal Inventory

Killen, like Stuart, is a base-load plant that historically runs at very high capacity factors. DP&L indicated that it believes

Inventory performance in 2010 is summarized on Exhibit 3-13. Killen's actually inventory days are compared to both the minimum inventory levels and to average inventory levels for coal plants in PJM. Killen's inventory levels were more than twice its stated minimums for most of the year.

Approve Inventory Goal

- Vice President, Commercial Operations
- Sr. Vice President of Generation & Marketing



Exhibit 3-13 Monthly Coal Inventory for Killen in 2010

Hutchings Coal Inventory

DP&L operates Hutchings as a seasonal plant running more during peak winter and summer months. As a result, DP&L does not believe

Inventory performance in 2010 is summarized on Exhibit 3-14. Hutchings's actually inventory days are compared to both the minimum inventory levels and to average inventory levels for coal plants in PJM. Hutchings's inventory levels were much lower than the stated minimums for most of the year.

Exhibit 3-14 Monthly Coal Inventory for O.H. Hutchings in 2010

EVA believes that DP&L should establish target inventory levels for each station in addition to minimum levels. The minimums are useful in establishing the justification for an emergency procurement but do not provide a basis for measurement of performance.

Physical Inventory Adjustments

During the era of full regulation, the PUCO mandated semi-annual physical inventory surveys and only allowed book adjustments if the surveys produced sequential errors in the same direction. Further, the adjustments were limited to 50 percent of the difference up to six percent. DP&L, like the other Ohio utilities, established its own procedures. DP&L's procedures are documented in DP&L Business Practice Generation – 001 Coal Pile Inventory. There is also a procedure related to Internal Audit's role in the physical inventory process. (DP&L Business Practice 741) Neither procedure establishes a threshold amount which would trigger an investigation of the results. The results from the last two physical inventory surveys are summarized in Exhibit 3-15.

	As-Observed	Statistical	Physical	Book		Difference		Capitalized	Recommended	d Adjustments
	Physical Inventory	Uncertainty*	Inventory	Inventory	Difference	% of Book	% of Burn	Tons**	Tons	Estimated \$
Stuart	960,150.0	-	960,150.0	968,243.1	(8,093.1)	-0.84%	-0.13%		(8,093.1)	(430,427.45)
Killen	472,497.4	8,410.5	480,907.9	509,326.2	(28,418.3)	-5.58%	-2.20%		(28,418.3)	(1,231,959.75)
Hutchings	96,014.1	(998.5)	95,015.6	94,411.9	603.7	0.64%	2.11%		603.7	39,131.58
2009	1,528,661.5	7,412.0	1,536,073.5	1,571,981.2	(35,907.7)	-2.28%	-0.5%		(35,907.7)	(1,623,255.6)
Stuart	1,088,898.9	30,431.0	1,119,329.9	1,236,956.3	(117,626.4)	-9.51%	-2.10%	9,703	(107,923.4)	(6,079,648.89)
Killen	403,317.8		403,317.8	401,360.5	1,957.3	0.49%	0.11%		1,957.3	92,854.70
Hutchings	59,240.6	(1,176.8)	58,063.8	49,773.9	8,289.9	16.66%	9.91%		6,289.9	566,060.90
2010	1,551,457.3	29.254.2	1,580,711.5	1,688,090.7	(107,379.2)	-6.36%	-1.4%		(99,676.2)	(5,420,733.3)

Exhibit 3-15 Physical Inventory Adjustments, 2009 and 2010

* Statistical Uncertainty was calculated by the vendor. If blank, the statistical uncertainty is greater than the difference tons and would create an adjustment less than zero.

**This reflects an increase in the base and capitalized.

The 2009 survey produced a significant adjustment for Killen. The 2010 survey produced significant adjustment for Stuart and Hutchings. EVA recommends that DP&L revise its

procedures to establish a threshold at which a discrepancy would trigger a root cause investigation.

Coal Procurement

DP&L buys high sulfur and non-NYMEX low sulfur coal on both a contract and spot basis to meet its requirements. DP&L also buys significant quantities of NYMEX coal over-the-counter. DP&L indicated its purchase decisions are driven by hedge guidelines

In 2010, DP&L's reported contract purchases are summarized in Exhibit 3-16.²⁹ High sulfur coal accounted for 68 percent of purchases. Three producers account for almost 90 percent of high sulfur coal contract supply.

Exhibit 3-16 DP&L Contract Coal Purchases

		Market Share		
Company	2010 Tons	Total	HS	
Alliance	1,766,810	24%	35%	
American	1,241,557	17%	25%	
Alpha-Cumberland	411,330	6%	8%	
Argus	21,142	0%	0%	
Bray	119,949	2%	0%	
Knight Hawk	187,788	3%	4%	
Massey	759,564	10%	0%	
Merrill Lynch	260,032	4%	0%	
Oak Hill	6,999	0%	0%	
Patriot	1,222,629	16%	0%	
Williamson	1,428,714	19%	28%	
Total	7,426,514			
High Sulfur	5,036,199	68%	100%	
Top Three		60%	88%	

DP&L reported a little over 300,000 tons of spot purchases in 2010 which are summarized in Exhibit 3-17. These data are also from DP&L's filings to EIA. Less than 10 percent of spot coal purchases are high sulfur coal.

Exhibit 3-17 DP&L's Reported Spot Coal Purchases, 2010.

²⁹ These data are derived from DP&L's filings to EIA which DP&L provided to EVA in response to Onsite 23. EIA's definition of contract is purchases for one year or longer.

			Sulfur	SO2			1
Supplier	Tons	Btu/lb	(%)	(Ib/MMBtu)	Ash (%)	Cents/Btu	\$/Ton
AEP	87,380	11,928	0.89	1.50	11.83	249.3	59.47
Alliance	14,810	12,797	0.77	1.20	10.40	292.1	74.76
Alpha-Cumberland	15,089	12,395	0.72	1.16	11.12	293.8	72.83
COALTRADE	82,494	11,953	0.88	1.48	10.70	248.1	59.31
Duke	17,776	12,348	2.45	3.96	7.50	219.7	54.27
Koch Carbon	8,169	11,947	0.90	1.50	11.82	250.3	59.81
Mercuria	34,084	11,962	0.90	1.50	10.59	269.9	64.56
Peabody Coal Sales	3,581	12,355	2.76	4.47	7.92	231.3	57.15
River Trading	29,581	11,788	0.87	1.48	12.43	299.4	70.59
RRI	10,329	12,929	0.87	1.35	9.73	327.2	84.61
TOTAL	303,293	12,055	0.99	1.64	10.97	261.4	63.03

DP&L makes substantial purchases of NYMEX coal. NYMEX refers to the New York Mercantile Exchange which in 1996 began providing companies in the electric power industry the opportunity to buy and sell electricity futures contracts. The buying and selling of these futures contracts and the related options contracts gave the power industry a price reference and risk management tool.³⁰ NYMEX thereafter expressed a desire to develop a similar product for coal. Coal is harder to trade than other commodities because of variations in quality and transportation. After conferring with coal producers and consumers, NYMEX sought and received regulatory approval to offer coal futures and options contracts. After some delay, on July 12, 2001, NYMEX began trading Central Appalachian Coal Futures. The term NYMEX coal has become synonymous with the Central Appalachian traded product.

The NYMEX product is basically a 12,000 Btu per pound coal, maximum sulfur content of one percent, and a maximum ash content of 13.5 percent. The contract is traded FOB barge on specified sections of the Big Sandy and Ohio Rivers. The trading is in 1,550 ton units, effectively a standard barge amount. NYMEX purchases can be bilateral or through clearing houses.

NYMEX is the only liquid trading option available for eastern U.S. coal. As such, some consumers have sought to hedge their coal prices through the use of NYMEX products. As the pricing of NYMEX coal does not correlate perfectly with either other Central Appalachian coals or with coals from other supply regions, NYMEX is an imperfect hedge for other coal types.

³⁰ There are also specifications for moisture, volatiles, sizing and grind,

The total purchases of low sulfur coal deliverable in 2010 exceeded the levels of low-sulfur coal that DP&L consumed in 2010. Most of the NYMEX purchased for 2010 was sold in 2009, the gains of which did not flow through the FUEL Rider. The sales in 2010 were part of the

optimizations which involved selling the NYMEX coal positions and buying high sulfur coal. The NYMEX sales by date are listed in Exhibit 3-19.

Exhibit 3-19

In addition to the NYMEX contracts DP&L entered into in 2010 for 2010 delivery, DP&L contracted in 2009 and 2010 for supplies of

Report of the Management/Performance and Financial Audit of the Fuel Purchased Power Rider of The Dayton Power and Light Company (09-1012-EL-EFC)

3-18

DP&L does not have a documented strategy for making these procurements. DP&L indicated it enters the markets based upon its analysis of its projected needs for coal, the range of potential burn rates at the Stations, and other market factors. Once the need to acquire additional supplies

is determined, the precise timing of the acquisition depends in large part on the analysts and traders who are watching daily and longer market prices, trends, plant dispatch rates, and coal and power purchase positions. The justifications for each purchase are not documented.

Similarly, DP&L sells off its NYMEX positions, only a portion of which is through optimizations. Sales to date of its NYMEX purchases for **Selection** are shown in Exhibit 3-21. As with its purchases, DP&L does not document the strategy and/or justifications for the non-optimization sales.

Given the le	evel of p	ourchases an	d DP&L's su	ccess in moving	g toward	coal,
it appears th	nat	· .			Part	cularly problematic are
the second	 	ofNYMEX	contracts D	P&L entered int	to in 2010	, by which time
DP&L fully	unders	tood				
According t	to DP&I	L's Commo	dity Position	Summary with	data throug	h January 10, 2010

(Exhibit 3-22), DP&L projects a committed burn that supports a need for high sulfur coal.³¹ DP&L's primary argument for the NYMEX futures is volume uncertainty, specifically loss of load due to customer switching. DP&L believes that in order to protect its shareholders from having excess high sulfur coal under contract, it needs to use a liquid hedge independent of its whether such hedges cause the cost of coal recovered through the FUEL Rider to be higher. EVA believes that the recovery of fuel costs obligates DP&L to obtain its coal in a least cost manner. The NYMEX strategy is discussed further in Section 5.

Exhibit 3-22

DP&L Committed Position Summary, January 2010

Master Agreements

DP&L uses Master Agreements as the primary contractual document with suppliers. While the content of the Master Agreements vary somewhat between parties, the basic components of the Master Agreements are listed in Exhibit 3-23. As provided for in the Master Agreement, the details of each transaction are then documented in a Confirmation. The Confirmation also contains any deviations to the Master that apply for the particular transaction. The Master Agreements appear to work well for DP&L by significantly reducing the time and resources required to negotiate each purchase agreement.

Exhibit 3-23 Components of the Master Agreements

³¹ Even absent a high committed burn, EVA believes that both Killen and Stuart are sufficiently economic that they would operate at high capacity factors independent of jurisdictional customer load

Article	Sections
Transactions	Procedures
Transactions	Confirmatione
	Permitations
form	Term and Cuminal Brouleione
	To emission due to Operational Incurs
Ohlisseinne	Oblighting for Durthans and Sale of Cool
Congations	Oppligations for Purchase and sale of Coal
	Resale of Coal
	Scheduling
	Delivery
	litle and indemnity
	Substitute Coal Sources
	Substitute Coal for Synfuel
	Taxes and Other Liabilities
Specifications	Specifications
	Unit Train or Truck Weighing
	Barge Weights
	Sampling and Analysis
	Representative Presence: Inspection
Quality Adjustments and Rejection Rights	Quality Adjustments
	Buyer's Rejection Rights
	Buyer's Suspension Rights
Settlement; Security	Billing and Payment
	Netting and Setoff
	Audit
	Reasonable Grounds for Insecurity
	Adequate Assurances
Force Majeure	Force Majeure
	Force Majeure: Definition
	Pro Rata Reductions
	Termination Rights
	Settlements and Capital Expenditures
Events of Default, Remedies, and	Events of Default
Limitations of Liability	Early Termination
<i>,</i>	Farly Termination Payment
	Bemedies
	Damages Stipulation
	Fynensøs
	limitation of liability
Arhitration	
Miscellaneous	Surressors and Assigns: Assignment
	Warranties
	Notices
	Confidentiality
	Governing Dw
	Entire Agreement: Amendments: Intermetation
	Constant and Constant Section Statistics
	Counterparts; serverability; survival
	inon-waiver; outy to mitigate; not Parmersnip or Iniro-Party Beneficiaries
	Administrator
Frank Transmitter & Charles	
Form or Transaction Confirmation	

Long-Term Contracts

As noted above, it is DP&L's practice to enter into master agreements with counter-parties and then use Confirmations for specific transactions. In 2010, DP&L was a party to

³² The confirmations are listed in Exhibit 3-24 with the contract date, the type of coal and the tonnage obligations from 2010 through The contracts in bold are the ones entered into in 2010. Tonnage is not included if subject to mutual agreement on price. Each of the confirmations, along with contract performance, is reviewed below.

Exhibit 3-24 Overview of Selected DP&L Contracts

³² EVA did not include three contracts under which DP&L received some shipments in 2010 because one contract was simply coal recovered from barge shipments and two of the contracts expired at the end of the 2009. The 2010 shipments simply completed the contract obligations.

This exhibit also provides the tonnage commitments. With respect to high sulfur coal, DP&L has

Alliance

In 2010, DP&L received coal under long-term contract	ets with Alliance Coal.	· ·
	The contracts are	for Illinois
Basin coal and allow for deliveries from the		
The basic terms of the two agreement	nts are provided in Exhi	ibit 3-25.

Exhibit 3-25 Long-Term Contracts with Alliance Coal

The agreements provide for quality adjustments.

This adjustment rate is fixed.

DP&L and Alliance entered into of these agreements are provided in Exhibit 3-26.

in 2010. The basic terms

Exhibit 3-26 2010 Confirms with Alliance Coal

Shipments under the Alliance agreements are summarized in Exhibit 3-27.

. The combination of the Alliance contracts and the sources used to supply the contracts does not allow a determination of compliance by contract or source. Assuming the most liberal specifications, Alliance was in compliance except with respect to

Exhibit 3-27 Shipments Under the Alliance Agreements, 2010

,				S02		Cents/	
Month	Plant	Tons	Btu/lb	(Ib/MMBtu)	Ash (%)	MMBtu	\$/Ton
January	Killen	18,978	11,662	4.73	7.51	193.20	45.06
February	Killen	82,138	11,626	4.83	7.55	193.20	44.92
March	Killen	55,875	11,568	5.01	7.89	193.20	44.70
April	Killen	10,953	11,561	4.98	7.91	194.50	44.97
May	Killen	46,298	11,584	5.04	8.04	194.50	45.06
June	Killen	39,258	11,560	5.12	8.06	194.50	44.97
July	Killen	60,119	11,606	5.15	8.01	196.70	45.66
August	Killen	53,158	11,643	5.22	8.11	197.20	45.92
September	Killen	88,137	11,598	5.16	8.23	198.30	46.00
October	Killen	41,301	11,578	5.32	8.14	199.30	46.15
November	Killen	66,429	11,594	5.23	7.94	199.00	46.14
December	Killen	109,349	11,525	5.21	8.06	199.00	45.87
	Killen	671,993	11,588	5.11	7.98	196.57	45.56
January	Stuart	59,132	11,650	4.79	7.42	258.10	60.14
February	Stuart	118,660	11,616	4.80	7.63	247.80	57.57
March	Stuart	50,466	11,572	5.05	7.84	240.40	55.64
April	Stuart	104,825	11,608	4.89	7.82	253.10	58.76
May	Stuart	88,746	11,605	5.08	8.02	236.80	54.96
June	Stuart	100,522	11,584	5.15	8.03	251.50	58.27
July	Stuart	113,319	11,638	5.09	7.95	252.70	58.82
August	Stuart	102,326	11,639	5.17	8.12	232.50	54.12
September	Stuart	115,387	11,607	5.20	8.14	240.30	55.78
October	Stuart	31,131	11,593	5.23	8.21	236.70	54.88
November	Stuart	99,589	11,585	5.32	7.96	231.30	53.59
December	Stuart	110,714	11,515	5.23	8.07	249.90	57 <u>.5</u> 5
	Stuart	1,094,817	11,601	5.08	7.94	244.65	56 <u>.76</u>
January		78,110	11,653	4.78	7.44	242.32	56.47
February		200,798	11,620	4.82	7.60	225.45	52.40
March		106,341	11,570	5.03	7.87	215.60	49.89
April		115,778	11,604	4.90	7.83	247.58	57 <i>.</i> 46
May		135,044	11,598	5.07	8.03	222.32	51.57
June		139,780	11,577	5.14	8.04	235.52	54.53
July		173,438	11,627	5.11	7.97	233.32	54.26
August		155,484	11,640	5.19	8.12	220.43	51.32
September		203,524	11,603	5.18	8.18	222.12	51.55
October		72,432	11,584	5.28	8.17	215.39	49.90
November		166,018	11,589	5.28	7. 9 5	218.37	50.61
December		220,063	11,520	5.22	8.07	224.60	51.75
TOTAL	All Plants	1,766,810	11,596	5.09	7.95	226.38	52.50

Report of the Management/Performance and Financial Audit of the Fuel Purchased Power Rider of The Dayton Power and Light Company (09-1012-EL-EFC)

El la veza de Carra d

Alpha

In 2010, DP&L was party to long-term coal contracts with Alpha for coal from the contracts were entered into between

All three contracts terminated on the same date. The basic terms of the agreements are provided on Exhibit 3-28.

Exhibit 3-28 Long-Term Contracts with Alpha

Despite having	tons under contract in 2010 DB&I	took only about	of
Despite naving	tons under contract in 2010, DF&L	look only about	01
. About	of this coal was		
	The balance was so	ld through the optimizations.	The
2010 optimizations	was the primary so	urce of ontimization value	
	was the primary se	diee of optimization value.	

Exhibit 3-29

Shipments under the Alpha agreements are summarized in Exhibit 3-30. This exhibit combines shipments under contracts. The combination of the Alpha contracts does not allow a determination of compliance with typical monthly specifications by contracts. Assuming the most liberal specifications, Alpha was in compliance with the typical monthly specifications except with respect to **compliance** which were out of compliance in at least three of the months.

Exhibit 3-30 Shipments Under the Alpha Contracts, 2010

Month Plant Tons /Ton (lb/MMBtu) Ash (%) MMBtu \$ January Killen 36,999 13,068 4.35 8.21 180.5 4 February Killen 41,463 13,091 3.87 8.05 183.7 4 March Killen 91,228 13,079 4.07 8.03 181.9 4 April Killen 17,838 13,087 3.81 8.05 180.3 4 May Killen 25,927 13,049 4.23 8.29 194.9 5 June Killen 17,919 13,133 4.11 7.33 200.9 5 Jaugust Killen 36,117 13,074 3.96 8.12 201.0 5 November Killen 315,299 13,079 4.08 8.08 189.1 4 January Stuart 17,639 13,068 3.44 8.28 200.9 5 March <th></th> <th>·</th> <th></th> <th></th> <th></th> <th></th> <th>On stal</th> <th></th>		·					On stal	
January Killen 36,999 13,068 4.35 8.21 180.5 4 February Killen 41,463 13,091 3.87 8.05 183.7 4 March Killen 91,228 13,079 4.07 8.03 181.9 4 April Killen 17,838 13,087 3.81 8.05 180.3 4 May Killen 17,838 13,087 3.81 8.05 180.3 4 June Killen 25,927 13,049 4.23 8.29 194.9 5 July Killen 25,287 13,114 4.22 7.92 201.0 5 August Killen 36,117 13,074 3.96 8.12 201.0 5 November Killen 17,639 13,079 4.08 8.08 189.1 4 January Stuart 17,639 13,060 4.09 8.12 201.0 5 March	Month	Plant	Tons	/Ton	SO2 (Ib/MMBtu)	Ash (%)	MMBtu	\$/Ton
February Killen 41,463 13,091 3.87 8.05 183.7 4 March Killen 91,228 13,079 4.07 8.03 181.9 4 April Killen 17,838 13,087 3.81 8.05 180.3 4 May Killen 17,838 13,087 3.81 8.05 180.3 4 May Killen 17,919 13,133 4.11 7.33 200.9 5 June Killen 17,919 13,133 4.11 7.33 200.9 5 August Killen 36,117 13,074 3.96 8.12 201.0 5 November Killen 17,674 13,028 4.18 8.60 201.0 5 December Killen 17,639 13,079 4.08 8.08 189.1 4 January Stuart 17,639 13,066 3.44 8.28 200.9 5 March Stuart 17,639 13,060 4.09 8.12 201.0 5	January	Killen	36,999	13.068	4.35	8.21	180.5	47.18
March Killen 91,228 13,079 4.07 8.03 181.9 4 April Killen 17,838 13,087 3.81 8.05 180.3 4 May Killen 17,838 13,087 3.81 8.05 180.3 4 May Killen 25,927 13,049 4.23 8.29 194.9 5 June Killen 17,919 13,133 4.11 7.33 200.9 5 July Killen 25,287 13,114 4.22 7.92 201.0 5 August Killen 17,874 13,028 4.18 8.60 201.0 5 December Killen 17,639 13,079 4.08 8.08 189.1 4 January Stuart 17,639 13,068 3.44 8.28 200.9 5 March Stuart 29,822 13,121 4.09 7.99 201.0 5 April	February	Killen	41,463	13.091	3.87	8.05	183.7	48.10
April Killen 17,838 13,087 3.81 8.05 180.3 4 May Killen 25,927 13,049 4.23 8.29 194.9 5 June Killen 17,919 13,133 4.11 7.33 200.9 5 July Killen 25,287 13,114 4.22 7.92 201.0 5 August Killen 36,117 13,074 3.96 8.12 201.0 5 November Killen 17,874 13,028 4.18 8.60 201.0 5 December Killen 17,639 13,079 4.08 8.08 189.1 4 January Stuart 17,639 13,068 3.44 8.28 200.9 5 March Stuart 17,639 13,060 4.09 8.12 201.0 5 March Stuart 49,6031 13,079 3.97 8.12 201.0 5 January	March	Killen	91,228	13.079	4.07	8.03	181.9	47.58
May Killen 25,927 13,049 4.23 8.29 194.9 5 June Killen 17,919 13,133 4.11 7.33 200.9 5 July Killen 25,287 13,114 4.22 7.92 201.0 5 August Killen 36,117 13,074 3.96 8.12 201.0 5 November Killen 17,874 13,028 4.18 8.60 201.0 5 December Killen 315,299 13,079 4.08 8.08 189.1 4 January Stuart 17,639 13,068 3.44 8.28 200.9 5 March Stuart 29,822 13,121 4.09 7.99 201.0 5 March Stuart 41,912 13,060 4.09 8.12 201.0 5 January Stuart 6,658 13,041 4.14 8.24 200.9 5 January	Apríl	Killen	17,838	13.087	3.81	8.05	180.3	47.19
June Killen 17,919 13,133 4.11 7.33 200.9 5 July Killen 25,287 13,114 4.22 7.92 201.0 5 August Killen 36,117 13,074 3.96 8.12 201.0 5 November Killen 17,874 13,028 4.18 8.60 201.0 5 December Killen 17,874 13,028 4.18 8.60 201.0 5 Killen 315,299 13,079 4.08 8.08 189.1 4 January Stuart 17,639 13,068 3.44 8.28 200.9 5 March Stuart 29,822 13,121 4.09 7.99 201.0 5 March Stuart 41,912 13,060 4.09 8.12 201.0 5 January Stuart 96,031 13,079 3.97 8.12 201.0 5 January 71,285	May	Killen	25,927	13,049	4.23	8.29	194.9	50.87
July Killen 25,287 13,114 4.22 7.92 201.0 5 August Killen 36,117 13,074 3.96 8.12 201.0 5 November Killen 17,874 13,028 4.18 8.60 201.0 5 December Killen 17,874 13,014 3.72 8.52 200.9 5 Killen 315,299 13,079 4.08 8.08 189.1 4 January Stuart 17,639 13,068 3.44 8.28 200.9 5 February Stuart 29,822 13,121 4.09 7.99 201.0 5 March Stuart 41,912 13,060 4.09 8.12 201.0 5 January Stuart 96,031 13,079 3.97 8.12 201.0 5 January 54,638 13,068 4.05 8.23 187.1 4 February 71,285 13,1	June	Killen	17,919	13,133	4.11	7.33	200.9	52.77
August Killen 36,117 13,074 3.96 8.12 201.0 5 November Killen 17,874 13,028 4.18 8.60 201.0 5 December Killen 4,647 13,014 3.72 8.52 200.9 5 Killen 315,299 13,079 4.08 8.08 189.1 4 January Stuart 17,639 13,068 3.44 8.28 200.9 5 February Stuart 29,822 13,121 4.09 7.99 201.0 5 March Stuart 41,912 13,060 4.09 8.12 201.0 5 March Stuart 6,658 13,041 4.14 8.24 200.9 5 January Stuart 96,031 13,079 3.97 8.12 201.0 5 January 54,638 13,068 4.05 8.23 187.1 4 February 71,285 13,10	July	Killen	25,287	13,114	4.22	7.92	201.0	52.72
November Killen 17,874 13,028 4.18 8.60 201.0 5 December Killen 4,647 13,014 3.72 8.52 200.9 5 Killen 315,299 13,079 4.08 8.08 189.1 4 January Stuart 17,639 13,068 3.44 8.28 200.9 5 February Stuart 17,639 13,060 4.09 7.99 201.0 5 March Stuart 29,822 13,121 4.09 7.99 201.0 5 April Stuart 6,658 13,041 4.14 8.24 200.9 5 January Stuart 96,031 13,079 3.97 8.12 201.0 5 January Stuart 96,031 13,079 3.97 8.12 201.0 5 January 54,638 13,068 4.05 8.23 187.1 4 February 71,285 13,1	August	Killen	36,117	13,074	3.96	8.12	201.0	52.56
December Killen 4,647 13,014 3.72 8.52 200.9 5 Killen 315,299 13,079 4.08 8.08 189.1 4 January Stuart 17,639 13,068 3.44 8.28 200.9 5 February Stuart 29,822 13,121 4.09 7.99 201.0 5 March Stuart 41,912 13,060 4.09 8.12 201.0 5 April Stuart 6,658 13,041 4.14 8.24 200.9 5 January Stuart 96,031 13,079 3.97 8.12 201.0 5 January Stuart 96,031 13,079 3.97 8.12 201.0 5 January Stuart 96,031 13,079 3.97 8.12 201.0 5 January 54,638 13,068 4.05 8.23 187.1 4 February 71,285 13,10	November	Killen	17,874	13,028	4.18	8.60	201.0	52.37
Killen315,29913,0794.088.08189.14JanuaryStuart17,63913,0683.448.28200.95FebruaryStuart29,82213,1214.097.99201.05MarchStuart41,91213,0604.098.12201.05AprilStuart6,65813,0414.148.24200.95Stuart96,03113,0793.978.12201.05January54,63813,0684.058.23187.14February71,28513,1043.968.02190.95March133,14013,0734.078.06187.94April24,49613,0743.908.10185.94May25,92713,0494.238.29194.95June17,91913,1334.117.33200.95July25,28713,1144.227.92201.05August36,11713,0743.968.12201.05November17,87413,0284.188.60201.05December4,64713,0143.728.52200.95	December	Killen	4,647	13,014	3.72	8.52	200.9	52.29
January Stuart 17,639 13,068 3.44 8.28 200.9 5 February Stuart 29,822 13,121 4.09 7.99 201.0 5 March Stuart 41,912 13,060 4.09 8.12 201.0 5 April Stuart 6,658 13,041 4.14 8.24 200.9 5 January Stuart 96,031 13,079 3.97 8.12 201.0 5 January 54,638 13,068 4.05 8.23 187.1 4 February 71,285 13,104 3.96 8.02 190.9 5 March 133,140 13,073 4.07 8.06 187.9 4 April 24,496 13,074 3.90 8.10 185.9 4 May 25,927 13,049 4.23 8.29 194.9 5 June 17,919 13,133 4.11 7.33 200.9		Killen	315,299	13,079	4.08	8.08	189.1	49.47
February Stuart 29,822 13,121 4.09 7.99 201.0 5 March Stuart 41,912 13,060 4.09 8.12 201.0 5 April Stuart 6,658 13,041 4.14 8.24 200.9 5 January Stuart 96,031 13,079 3.97 8.12 201.0 5 January 54,638 13,068 4.05 8.23 187.1 4 February 71,285 13,104 3.96 8.02 190.9 5 March 133,140 13,073 4.07 8.06 187.9 4 April 24,496 13,074 3.90 8.10 185.9 4 May 25,927 13,049 4.23 8.29 194.9 5 June 17,919 13,133 4.11 7.33 200.9 5 August 36,117 13,074 3.96 8.12 201.0 5	January	Stuart	17,639	13,068	3.44	8.28	200.9	52.51
March Stuart 41,912 13,060 4.09 8.12 201.0 5 April Stuart 6,658 13,041 4.14 8.24 200.9 5 Stuart 96,031 13,079 3.97 8.12 201.0 5 January 54,638 13,068 4.05 8.23 187.1 4 February 71,285 13,104 3.96 8.02 190.9 5 March 133,140 13,073 4.07 8.06 187.9 4 April 24,496 13,074 3.90 8.10 185.9 4 May 25,927 13,049 4.23 8.29 194.9 5 June 17,919 13,133 4.11 7.33 200.9 5 July 25,287 13,114 4.22 7.92 201.0 5 August 36,117 13,074 3.96 8.12 201.0 5 December 17,874 <td>February</td> <td>Stuart</td> <td>29,822</td> <td>13,121</td> <td>4.09</td> <td>7.99</td> <td>201.0</td> <td>52.75</td>	February	Stuart	29,822	13,121	4.09	7.99	201.0	52.75
April Stuart 6,658 13,041 4.14 8.24 200.9 5 Stuart 96,031 13,079 3.97 8.12 201.0 5 January 54,638 13,068 4.05 8.23 187.1 4 February 71,285 13,104 3.96 8.02 190.9 5 March 133,140 13,073 4.07 8.06 187.9 4 April 24,496 13,074 3.90 8.10 185.9 4 May 25,927 13,049 4.23 8.29 194.9 5 June 17,919 13,133 4.11 7.33 200.9 5 July 25,287 13,114 4.22 7.92 201.0 5 August 36,117 13,074 3.96 8.12 201.0 5 December 17,874 13,028 4.18 8.60 201.0 5 December 4,647 13,014 </td <td>March</td> <td>Stuart</td> <td>41,912</td> <td>13,060</td> <td>4.09</td> <td>8.12</td> <td>201.0</td> <td>52.50</td>	March	Stuart	41,912	13,060	4.09	8.12	201.0	52.50
Stuart96,03113,0793.978.12201.05January54,63813,0684.058.23187.14February71,28513,1043.968.02190.95March133,14013,0734.078.06187.94April24,49613,0743.908.10185.94May25,92713,0494.238.29194.95June17,91913,1334.117.33200.95July25,28713,1144.227.92201.05July36,11713,0743.968.12201.05November17,87413,0284.188.60201.05December4,64713,0143.728.52200.95	April	Stuart	6,658	13,041	4.14	8.24	200.9	52.40
January54,63813,0684.058.23187.14February71,28513,1043.968.02190.95March133,14013,0734.078.06187.94April24,49613,0743.908.10185.94May25,92713,0494.238.29194.95June17,91913,1334.117.33200.95July25,28713,1144.227.92201.05July13,6743.968.12201.05August36,11713,0743.968.12201.05November17,87413,0284.188.60201.05December4,64713,0143.728.52200.95		Stuart	96,031	13,079	3.97	8.12	<u>201.0</u>	52.57
February71,28513,1043.968.02190.95March133,14013,0734.078.06187.94April24,49613,0743.908.10185.94May25,92713,0494.238.29194.95June17,91913,1334.117.33200.95July25,28713,1144.227.92201.05August36,11713,0743.968.12201.05November17,87413,0284.188.60201.05December4,64713,0143.728.52200.95	January		54,638	13,068	4.05	8.23	187.1	48.90
March133,14013,0734.078.06187.94April24,49613,0743.908.10185.94May25,92713,0494.238.29194.95June17,91913,1334.117.33200.95July25,28713,1144.227.92201.05August36,11713,0743.968.12201.05November17,87413,0284.188.60201.05December4,64713,0143.728.52200.95	February		71,285	13,104	3.96	8.02	190.9	50.04
April24,49613,0743.908.10185.94May25,92713,0494.238.29194.95June17,91913,1334.117.33200.95July25,28713,1144.227.92201.05August36,11713,0743.968.12201.05November17,87413,0284.188.60201.05December4,64713,0143.728.52200.95	March		133,140	13,073	4.07	8.06	187.9	49.13
May25,92713,0494.238.29194.95June17,91913,1334.117.33200.95July25,28713,1144.227.92201.05August36,11713,0743.968.12201.05November17,87413,0284.188.60201.05December4,64713,0143.728.52200.95	April		24,496	13,074	3.90	8.10	185.9	48.61
June17,91913,1334.117.33200.95July25,28713,1144.227.92201.05August36,11713,0743.968.12201.05November17,87413,0284.188.60201.05December4,64713,0143.728.52200.95	May		25,927	13,049	4.23	8.29	194.9	50.87
July25,28713,1144.227.92201.05August36,11713,0743.968.12201.05November17,87413,0284.188.60201.05December4,64713,0143.728.52200.95	June		17,919	13,133	4.11	7.33	200.9	52.77
August 36,117 13,074 3.96 8.12 201.0 5 November 17,874 13,028 4.18 8.60 201.0 5 December 4,647 13,014 3.72 8.52 200.9 5	July		25,287	13,114	4.22	7.92	201.0	52.72
November 17,874 13,028 4.18 8.60 201.0 5 December 4,647 13,014 3.72 8.52 200.9 5	August		36,117	13,074	3.96	8.12	201.0	52.56
December 4,647 13,014 3,72 8,52 200.9 5	November		17,874	13,028	4.18	8.60	201.0	52.37
	December		4,647	13,014	3.72	8.52	200.9	52.29
TOTAL 411,330 13,079 4.05 8.09 191.9 5		TOTAL	411,330	13,079	4.05	8.09	191.9	50.19

American Coal

In 2010, DP&L received coal under contracts with American Coal. The basic provisions of these contracts are summarized in Exhibit 3-31.

Exhibit 3-31 Long-Term Contracts with American Coal

The agreements contain This is inconsistent with industry practice.
The earlier American Coal contract is the only contract in DP&L's portfolio which provides for

No contemporaneous documentation was provided. DP&L's response to EVA stated the following contemporaneous reasons:

- DP&L had contracted for adequate 2010 high sulfur coal supply for both Stuart and Killen Stations based on the forecasted burns at that time.
- The \$ ______ price made the coal approximately equal to the broker price for 2010 Illinois Basin coal at the time.
- The broker reported price for Illinois Basin coal had declined \$0.75 per ton in the week preceding the notice.

DP&L believes its judgment was validated when it was able to purchase coal from the second fro

EVA reviewed the broker quote in late November and disputes DP&L's position that the contract price was higher than the market at that time. DP&L indicated it relied on broker sheets, including ICAP United, to make this determination. There are several problems with this finding. First, the market for Illinois Basin coal is not liquid. The ICAP United sheet clearly states that the prices provided for Illinois Basin coals are "Vaughn's View of the U.S. Coal Markets", in other words, not necessarily a transactable number (Exhibit 3-32).

Exhibit 3-32 Vaughn's View of the U.S. Coal Markets, November 20, 2009

 VICAP.
 20-Nov-09
 www.icapenergy.com

 ICAP United, Inc - Coal
 Dan Vaughn @ 417-336-5582
 Ian Tapsall, Manzar lqbal @ 203-663-9425
 Matt Keck @ 502-327-1417

Vaughn's View of the U.S. Coal Markets - a perspective provided by Dan Vaughn to assist in marking coals to market

ILB Barge	Coal												
Origin	Btu	#SO2	Dec	Jan	Q1 10	Q2 10	Q3 10	Q4 10	Q1 11	Q2 11	CY 10	CY 11	CY 12
L. OH Rvr	11500	2.0	47.50	47.75	48.00	50.50	53.50	56.50	59.00	61.00	52.13	62.00	65.25
L. OH Rvr	11500	5.0	36.00	36.25	36.50	39.00	41.50	44.50	47.00	49.00	40.38	50.00	53.00

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Second, the broker pricing is for a generic Illinois Basin barge coal. The specific coal under the American Coal contract was significantly **Contract was significantly and the second s**

View of the World showed a market in steep contango³³ which suggests that an imminent rise in prices is expected by market participants. This is particularly relevant when considering the coal price under the American Coal contract was the second lowest cost coal DP&L had under contract.

While hindsight review is interesting, it really does not determine the prudency of an action. Further, the February 2010 purchase could have been in addition to the option tons and would have possibly reduced the tonnage purchased from **sectors** in July at a substantially higher price.

Shipments under the American agreements are summarized in Exhibit 3-33. This exhibit combines shipments under the contracts as well as an additional sector of the American Coal contracts used to supply the contracts does not allow a determination of compliance by contract. With the exception of months, the shipments under the American coal contracts were in compliance with its specifications.

³³ A market is said to be in contango when future prices are higher than current prices. Markets are normally in contango, due to inflation alone. A market is in steep contango when future prices are substantially higher. According to Vaughn's view of the world, high sulfur Illinois Basin coal barge prices were expected to increase by about 20 percent between calendar year 2010 and calendar year 2011.

				SO2	Ash	Cents/	
Supplier	Plant	Tons	Btu/lb	(Ib/MMBtu)	(Ib/MMBtu)	MMBtu	\$/Ton
January	Killen	27,996	11.806	4.10	7.11	159.700	\$37.71
February	Killen	44,547	11.898	4.20	6.88	163.700	\$38.95
March	Killen	31,811	11,906	4.35	7.06	163.700	\$38.98
April	Killen	13,478	11,913	4.28	6.94	163.700	\$39.00
May	Killen	71,876	11,915	4.23	7.17	164.600	\$39.22
June	Killen	60,493	11,827	4.30	7.37	164.800	\$38.98
July	Killen	67,724	11,937	4.14	7.11	164.900	\$39.37
August	Killen	55,874	11,935	4.11	7.26	164.800	\$39.34
September	Killen	62,412	11,916	4.10	7.17	164.600	\$39.23
October	Killen	25,873	11,982	4.29	6.70	163.700	\$39.23
November	Killen	24,732	11,966	4.36	6.74	163.700	\$39.18
Decem <u>ber</u>	Killen	30,964	11,866	4.21	6.87	163.700	\$38.85
	Killen	517,780	11,905	4.20	7.09	164.123	\$39.08
January	Stuart	54,017	11,854	4.17	6.95	265.800	\$63.02
February	Stuart	54,448	11,843	4.19	6.97	265.700	\$62.93
March	Stuart	89,740	11,892	4.34	7.02	258.700	\$61.53
April	Stuart	28,463	11,990	4.20	6.80	277.100	\$66.45
May	Stuart	95,191	11,935	4.21	7.09	254.400	\$60.73
June	Stuart	67,886	11,808	4.20	7.40	258.300	\$61.00
July	Stuart	72,203	11,969	4.23	7.05	265.400	\$63.53
August	Stuart	74,947	11,912	3.74	7.28	264.000	\$62.90
September	Stuart	41,299	11,965	4.10	7.14	239.500	\$57.31
October	Stuart	12,398	12,057	4.11	6.61	243.500	\$58.72
November	Stuart	52,334	11,960	4.38	6.73	254.900	\$60.97
<u>December</u>	Stuart	80,851	11,822	4.20	6.89	266.800	<u>\$63.08</u>
	Stuart	723,777	11,901	4.18	7.04	260.355	\$61.97
January		82,013	11,838	4.14	7.00	229.678	54.38
February		98,995	11,868	4.19	6.93	219.684	52.14
March		121,551	11,896	4.34	7.03	233.816	55.63
April		41,941	11,965	4.23	6.84	240.817	57.63
May		167,067	11,926	4.22	7.12	215.803	51.48
June		128,379	11,817	4.25	7.39	214.205	50.62
July		139,927	11,954	4.18	7.08	216.826	51.84
August		130,821	11,922	3.90	7.27	221.585	52.83
September		103,711	11,936	4.10	7.16	194.500	46.43
October		38,271	12,006	4.23	6.67	189.661	45.54
November		77,066	11,962	4.38	6.74	225.622	53.98
December		111,815	11,834	4.20	6.88	238.173	56.37
		1,241,557	11,903	4.19	7.06	220.215	52.42

Exhibit 3-33 Shipments under the American Coal Contract

In **DP&L** entered into another agreement with American Coal that provided for shipments beginning in **DP&L**. The basis terms of this agreement are provided in Exhibit 3-34.

Exhibit 3-34 2010 Contract with American Coal

EVA disagrees with DP&L's conclusion regarding price. A review of Vaughn's View of the U.S. Coal Markets at the time of the decision shows that the Calendar Year 2012 price for high sulfur Illinois Basin coal FOB barge was \$50.75 per ton for an 11500 Btu per pound, 5.0 pound

SO₂ product. (Exhibit 3-35)

Exhibit 3-35 Vaughn's View of the U.S. Coal Markets, October 25, 2010

	AP. hited, Inc	- Coal	25-Oct-10		www.ica Dan Vaugi	penergy.c hn @ 417-3	: <u>om</u> :3 8-5582	lan Tapsal	l, Manzar kj	bal @ <u>203-</u>	663-9425	Matt Keci	<@ 502-327	7-1417	
ILB Barge	Coal														
Origin	Btu	#502]	Nov	Dec	Q1 11	Q2 11	Q3 11	Q4 11	Q1 12	Q2 12	Q3 12	CY 11	CY 12	CY 13
L. OH Rvr	11500	2.5		62.00	62.00	63.00	63.50	64.00	64.50	66.00	66.50	67.00	63.75	66.75	69.75
L. OH Rvr	11500	5.0		45.00	45.00	46.00	46.50	47.00	47.50	50.00	50.50	51.00	46.75	50.75	53.75
	-														

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A review of the committed positions at that time shows that DP&L had only million tons of high sulfur coal under contract.³⁵ This is against an expected high sulfur burn of over

³⁶ In other words,

Finally, during the fourth quarter

of 2010, DP&L which claimed hedging commitments as the reason

have gone to the market for a high sulfur replacement.

Exhibit 3-36 Difference in Costs Between American Coal

Knight Hawk

In 2010, DP&L received coal under long-term contract with Knight Hawk. The basic provisions of this contract are provided in Exhibit 3-37.

Exhibit 3-37

Long Term Contract With Knight Hawk

The contract was amended in May to provide for a	a	
tons. This adjustment related to		
The Knight Hawk agreement provided for	but the method	lology was weak
The		

³⁰ DP&L indicated it e	xpects its 2012 high sulfu	r coal requirements to be
blending assumptions.	The high sulfur requirem	ents could be

tons based upon certain

Exhibit 3-38 SO₂ Emission Allowance Prices

In 2010, the average SO_2 emission allowance price was under \$0.02 per pound of \$O_2. This is significantly below the variable cost of scrubbing. As a rule,

Shipments under the Knight Hawk agreement are summarized in Exhibit 3-39.

Exhibit 3-39

Shipments Under the Knight Hawk Agreement, 2010

Month	Plant	Tons	Btu/Ib	SO2 (Ib/MMBtu)	Ash (%)	Cents/ MMBtu	\$/Ton
January	Killen	6,791	11,466	4.76	7.62	188.5	43.23
February	Killen	15,127	11,372	4.12	7.63	188.8	42.94
March	Killen	21,423	11,364	4.29	7.59	188.9	42.93
April	Killen	4,949	11,299	4.37	8.14	189.6	42.85
May	Killen	19,740	11,377	4.27	7.62	189.3	43.07
June	Killen	14,817	11,409	4.29	7.89	189.2	43.17
July	Killen	21,262	11,367	4.43	7.91	191.9	43.63
August	Killen	14,603	11,365	4.68	8.07	192.9	43.85
September	Killen	10,180	11,298	4.94	8.15	193.1	43.63
October	Killen	9,757	11,371	4.40	7.89	191.7	43.60
November	Killen	24,429	11,352	4.86	8.12	191.7	43.52
December	Killen	24,710	11,356	4.83	8.01	195.9	44.49
		187,788	11,366	4.53	7.88	191.3	43.48

In 2009, DP&L entered into a contract with Knight Hawk for coal deliveries in The basic provisions are provided in Exhibit 3-40. DP&L appropriately reduced

Exhibit 3-40 Knight Hawk Contract

Massey

In 2010, DP&L received coal under long-term contract with Massey. The basic provisions of this contract are summarized in Exhibit 3-41.

Exhibit 3-41

Overview of Massey Long-Term Contract

This is the only DP&L contract built into the Confirmation.
Interestingly, the
This contract also differs with respect to

³⁷ This contract was negotiated prior to the FUEL Rider. The comments are intended to be forward-looking as DP&L negotiates new contracts.

			:	
Finally,				

Shipments under the Massey agreement are summarized in Exhibit 3-42.

Month	Plant	Tons	Btu/ib	SO2 (Ib/MMBtu)	Ash (Ib/MMBtu)	Cents/ MMBtu	\$/Ton
January	Stuart	55,484	11,548	1.63	12.54	210.70	48.66
February	Stuart	41,353	11,517	1.34	11.88	211.20	48.65
March	Stuart	79,813	11,742	1.45	11.98	210.40	49.41
April	Stuart	44,443	11,934	1.58	12.28	209.40	49.98
May	Stuart	92,411	11,854	1.52	12.40	209.60	49.69
June	Stuart	74,752	11,800	1.42	12.40	209.70	49.49
July	Stuart	53,636	11,735	1.35	12.18	210.20	49.33
August	Stuart	72,376	11,816	1.51	12.46	210.40	49.72
September	Stuart	53,228	11,906	1.63	12.22	210.40	50.10
October	Stuart	48,160	12,094	1.57	12.24	209.80	50.75
November	Stuart	68,135	12,217	1.56	11.89	209.60	51.21
December	Stuart	75,773	12,218	1.46	11.90	209.60	51.22
	· · · · · ·	759,564	11,877	1.50	12.20	210.03	49.89

Exhibit 3-42 Shipments Under Massey Contract, 2010

The annual average was compliance with all of the contract specifications except

DP&L provided a contract with **Example 1** as one of its active contracts. The basic terms of the contract are summarized in Exhibit 3-43. This is effectively a

Exhibit 3-43 Overview of

DP&L is not showing any coal purchases under the **contract in 2010**. The entire quantity was consumed in Optimization A.

Patriot Coal

In 2010, DP&L received coal under	long-term contract	with Patriot.	
	38	39/40	
			41
The terms of the long-term	m contract are summa	arized Exhibit 3-44	
Exhibit 3-44 Overview of Patriot Long-Term Contra	ct		

Shipments under the Patriot agreement are summarized in Exhibit 3-45.

•				Sulfur	SO2	:	Ash	Cents/	
Month	Plant	Tons	Btu/lb	(%)	(ib/MMBtu)	Ash (%)	(Ib/MMBtu)	MMBtu	\$/Ton
January	Stuart	101,598	11,481	0.93	1.62	15.42	13.4	247.9	\$56.92
February	Stuart	55,849	11,526	0.82	1.42	15.43	13.4	248.0	\$57.17
March	Stuart	137,912	11,466	0.78	1.36	16.14	14.1	248.1	\$56.89
April	Stuart	87,517	11,5 1 9	0.71	1.23	16.12	14.0	247.9	\$57.11
May	Stuart	106,174	11,477	0.84	1.46	15.25	13.3	248.0	\$56.93
June	Stuart	108,702	11,588	0.81	1.40	15.01	13.0	248.1	\$57.50
July	Stuart	116,275	11,609	0.83	1.43	15.36	13.2	247.8	\$57.53
August	Stuart	113,931	11,486	0.83	1.45	15.01	13.1	248.5	\$57.09
September	Stuart	78,408	11,568	0.82	1.42	15.21	13.1	249.4	\$57.70
October	Stuart	86,748	11,654	0.78	1.34	15.26	13.1	249.1	\$58.06
November	Stuart	135,262	11,590	0.80	1.38	15.61	13.5	248.5	\$57.60
December	Stuart	94,253	11,472	0.75	1.31	15.54	13.5	248.3	\$56.97
	-	1,222,629	11,535	0.81	1.40	15.46	13.4	248.3	57.28

Exhibit 3-45 Shipments Under the Patriot Agreement, 2010

Based upon the Btu content of the coal, it appears that the deliveries were entirely of Specification A coal. There were a couple of minor non-compliances with **State Complete Contract**. The was above the contract specifications in six months. This is an issue particularly given the poor metric for assessing the penalty amount.

Williamson Energy

In 2010, DP&L received coal under **contract with Williamson Energy**; This contract, the terms of which are summarized in Exhibit 3-46, represents DP&L's

Exhibit 3-46 Overview of Williamson Long-Term Contract

42

The terms of the price negotiation favor

⁴² According DP&L, the decision to enter into the term agreement with Williamson is that

The agreement also does not believes this is inappropriate.

As previously discussed, EVA

Shipments under the Williamson agreement are summarized in Exhibit 3-47.

Exhibit 3-47

Shipments Under the Williamson Contract, 2010

				Sulfur		Moisture	Cents/	
Month	Plant	Tons	Btu/Ib	(%)	Ash (%)	(%)	MMBtu	\$/Ton
January	Stuart	147,933	11,550	2.45	9.24	11.86	241.8	55.86
February	Stuart	118,756	11,561	2.51	9.13	.11.92	241.8	55.91
March	Stuart	109,510	11,513	2.38	9.16	12.05	241.9	55.70
April	Stuart	42,421	11,424	2.29	9.21	12.53	241.8	55.25
May	Stuart	155,495	11,568	1.69	8.39	12.29	241.4	55.85
June	Stuart	131,506	11,598	1.54	8.47	11.95	241.3	55.97
July	Stuart	177,062	11,650	1.99	8.91	11.25	241.5	56.27
August	Stuart	120,590	11,712	2.57	9.90	10.02	242.1	56.71
September	Stuart	128,753	11,612	2.57	9.58	10.88	242.4	56.29
October	Stuart	94,241	11,638	2.52	9.83	10.55	242.0	56.33
November	Stuart	111,321	11,582	2.51	9.89	10.85	242.2	56.10
December	Stuart	91,126	11,432	2.37	9.66	12.12	242.7	55.49
		1,428,714	11,583	2.25	9.22	11.49	241.9	56.03

⁴³ This comment is meant to be prospective in nature as DP&L negotiates future contracts

DP&L took all of the coal to Stuart. Shipments were generally compliant with the monthly guaranteed specifications except

Transportation

Most coal is delivered by barge. Hutchings receives coal by rail and truck. The transportation agreements are reviewed in this section.

Barge

In 2006, DP&L entered into a for the barging of coal and limestone for Killen and Stuart for the years .

The biggest issue under the current agreement has been demurrage. As shown in Exhibit 3-48,

Exhibit 3-48 Barge Demurrage, 2008-2010

The timing is somewhat unfortunate as the strength in the export coal market has resulted in higher barge rates as producers limited by east coast export capacity are looking to the Gulf. The growth of steam coal exports through the Gulf can be seen on Exhibit 3-49. Another sign of the strength of the barge market is a new 15-year agreement between Massey and Kinder Morgan to ship up to six million tons annually through the Gulf.⁴⁵ The net effect in the short run is the tightening of the barge supply as transit time to the Gulf reduces available barge capacity.

and a second of the second second second

⁴⁴ Larkin reviewed the specific circumstances in March 2010 in Section 6.

⁴⁵ SNL Report, February 24, 2011

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Exhibit 3-49 U.S. Steam Coal Exports Through U.S. Guif by Month (1,000 Tons)

Rail

DP&L is party to a rail agreement with the delivery

for Hutchings coal

4 COAL TRADING AND OPTIMIZATIONS

Background

In 2006, DP&L entered into an agreement with Merrill Lynch Commodities Inc. (MLCI) that provided for MLCI to help manage DP&L's coal portfolio.¹ MLCI assisted DP&L in extracting value out of its coal positions. After MLCI's departure, DP&L continued with an active management program. According to DP&L's financial statements, in 2008 and 2009 DP&L sold considerable quantities of the coal it had purchased to third parties. The results of these sales can be seen on DP&L's financial statements. As shown in Exhibit 4-1, in 2008 and 2009 DP&L recorded gains from the sale of coal of \$83.4 million and \$56.3 million, respectively. In 2010, DP&L recorded gains from the sale of coal in the amount of \$4.1 million.

Exhibit 4-1 Gains From Sale of Coal

	For the year			nded Decem	31,	
\$ in millions		2010		2009		2008
Cost of revenues:						
Fuel costs	\$	388.8	\$	391.7	\$	1,223.3
Gains from sale of coal		(4.1)		(56.3)		(83.4)
Gains from sale of emission allowances		(0.8)		(5.0)		(34.8)
Net fuel		383.9		330.4		243.0

Two activities historically produced the gains from the sale of coal: DP&L's trading activities and DP&L's optimization activities. The trading activities are primarily the buying and selling of NYMEX contracts. As noted above, DP&L sold million tons of its NYMEX contracts in 2009 which produced substantial gains in 2009. The optimizations per DP&L's Application are the "opportunities to reduce costs by transactions to optimize the fuel and purchased power portfolio and to reduce the risks of market price fluctuations." As part of the Stipulation, DP&L negotiated to keep 75 percent of the optimization values. DP&L views these as separate activities. EVA believes that they are interrelated as discussed below.

Coal Trading

During the period in which DP&L did not receive fuel cost recovery, DP&L developed an active coal trading business. EVA did not review the transactions but it is EVA's understanding that DP&L bought and sold NYMEX futures and sold non-NYMEX coal positions it had under existing supply agreements.

¹ DPL Press Release, DPL Announces New Coal Services Agreement; Agreement to Optimize DP&L Supply Portfolio, June 8, 2006

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DP&L has continued its coal trading activities under the FUEL Rider. DP&L is actively buying and selling NYMEX hedges as it believes NYMEX contracts are the best vehicle for protecting its shareholders from a long coal position given uncertainties related to its burn levels.

EVA is not aware of any utility that uses financial instruments and/or actively trades coal contracts as a significant part of their regulated activities.² One regulated utility which was criticized for not using financial instruments recently performed an exhaustive study that concluded that the use of financial instruments would be unwise.³ That being said, most utilities actively manage their contract portfolios in order to minimize costs. The full benefits of the active management flow through their fuel costs.

Trading and/or the use of NYMEX contracts for hedging have the potential for increasing costs of coal to jurisdictional customers as discussed below. They further create a potential conflict of interest between generating gains for shareholders versus reducing the costs of coal to customers.

Optimizations

The optimizations are transactions involving fuel or power which reduce costs. DP&L "developed reporting and accounting procedures to properly credit 25% of the jurisdictional share of gains and losses associated with coal sales, net of replacement coal costs, to retail customers."

The calculations are as follows:

Calculation #1 - Gain on Coal Sale

- Existing Contract Price

+ Sales Price of Existing Contract

= Resulting Gain on Coal Sale

Calculation #2 - Optimization Benefit

Sales price of existing contract

- Replacement Contract Price

- Difference of Delivery and O&M Costs

= Optimization Benefit

Optimization Benefit * 75% = DP&L share

Calculation #3 - Impact to Fuel Rider

² Duke Energy Ohio actively manages its coal supply to "flatten" its position, not to hedge volumes or realize gains. Appalachian Power has regulatory approval to use financial hedges in a very limited way.

³ In April 2009, SCE&G agreed to perform an analysis of the feasibility, costs and potential benefits of operating a financial hedging program for its coal supplies for electric generation as part of a settlement in a fuel case. In January 2010, SCE&G issued its report which concluded "Given the lack of any apparent financial benefit from using coal derivatives in its coal purchasing practices, coupled with a number of other non-quantitative concerns, it would be unwise at this time and in current market conditions for SCE&G to modify its current coal purchasing practices to include any use of financial derivatives." (SNL Coal Report, January 21, 2010)
- Replacement Contract Price
- + Resulting Gain on Coal Sale
- DPL Share of Optimization Benefit
- = Resulting Impact to Fuel Rider

The following are two illustrative examples of the calculations just described

Calculation #1	Gain on Coal Sale	<u>A</u>	<u>B</u>
	Purchase Price	50.00	65.00
	Sale Price	75.00	75.00
	Gain on Coal Sale	25.00	10.00
Calculation #2	Optimization Benefit		
	Sale Price	75.00	75.00
	Replacement Coal Price	55.00	55.00
	Difference in Transportation and O&M	<u>8.00</u>	<u>8.00</u>
	Replacement Coal Cost	63.00	63.00
	Optimization Benefit	12.00	12.00
	DP& Share of Optimization Benefit	9.00	9.00
Calculation #3	Impact to FUEL Rider		
	Replacement Coal Cost	63.00	63.00
	Gain on Coal Sale	25.00	10.00
	DP&L Share of Benefit	-9.00	-9.00
	Charge to Fuel Rider	47.00	62.00

In Example A, DP&L originally purchased a NYMEX contract for \$50 per ton, sold it for \$75 and then secured an ILLB replacement contract with the same Btu content for \$63 per ton. In Example B, all of the numbers are the same except DP&L originally purchased a NYMEX contract for \$65 per ton. After divvying up optimization benefits, the Fuel Rider was charged \$47 per ton in Exhibit A and \$62.00 per ton in Exhibit B. While the optimization benefit is not based upon the original purchase price of the coal that is sold, the impact to the FUEL Rider is. In other words, the gain on the coal sale has a large impact on the FUEL Rider.

In 2010, DP&L identified 10 optimizations which are summarized in Exhibit 4-2 and the proceeds from all of these optimizations total **million**.⁴ The project team was unable to determine why DP&L's proceeds from optimizations **million** do not match the gains from sale of coal on the 2010 annual financial statement (\$4.1 million).

⁴ Subsequent adjustments have altered this number.

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Exhibit 4-2 Summary of 2010 Coal Optimizations



When DP&L performs an optimization, all of the details of the transactions are input into its Fuel Optimization Model template, which is an Excel spreadsheet. This model calculates the total value of the coal contracts sold (optimized) and the total replacement cost of the contracts purchased on a dollar per MMBtu basis. The model takes into account the changes in transportation and operating and maintenance costs. The gain on the optimization is the difference between the sales price and the quality-adjusted replacement price. DP&L retains 75 percent of the gain.

Review of Optimizations

Optimization 2010-A

The largest optimization in 2010 is 2010-A in which DP&L sold **and and and and and and and and replaced it with and and coal.** The basic economics of Optimization 2010-A are summarized in Exhibit 4-3.

Exhibit 4-3

DP&L Fuel Optimization Model: Optimization 2010-A



	:
Optimization 2010-B	
Optimization 2010-B is what DP&L refers to as a time swap. DP&L sells	tons over
	at a
discounted fixed price. (See Exhibit 4-4)	

Exhibit 4-4 DP&L Fuel Optimization Model: Optimization 2010-B



Optimization 2010-C

Optimization 2010-C is another time swap. DP&L is exchanging

at a higher price (See Exhibit 4-5).

Exhibit 4-5 DP&L Fuel Optimization Model: Optimization 2010-C

and the second	

Optimization 2010-D

Optimization 2010-D is another time swap. DP&L is exchanging

as an optimization (See Exhibit 4-

6).

Exhibit 4-6 DP&L Fuel Optimization Model: Optimization 2010-D



Optimization 2010-E

Optimization 2010-E is a swap of second seco

Exhibit 4-7

DP&L Fuel Optimization Model: Optimization 2010-E



Optimization 2010-F

Optimization 2010-F is a swapping

economics of Optimization 2010-F are summarized in Exhibit 4-8.

Exhibit 4-8

DP&L Fuel Optimization Model: Optimization 2010-F



Optimization 2010-G

Optimization 2010-G is the swap of **an example of the second seco**

The basic

Exhibit 4-9 DP&L Fuel Optimization Model: Optimization 2010-G



Optimization 2010-H

Optimization 2010-H is a swap of **Exhibit 4-10**. The basic economics of Optimization 2010-H are summarized in Exhibit 4-10.

Exhibit 4-10 DP&L Fuel Optimization Model: Optimization 2010-H

Optimization 2010-I

Optimization 2010-I is the swap of economics of Optimization 2010-G are summarized in Exhibit 4-11.

The basic

Exhibit 4-11 DP&L Fuel Optimization Model: Optimization 2010-I

Optimization 2010-J

Optimization 2010-J is the swapping of	. The basic
economics of Optimization 2010-J are si	ummarized in Exhibit 4-12. It is not clear why DP&L
did not	

Exhibit 4-12 DP&L Fuel Optimization Model: Optimization 2010-J



Concerns with DP&L Hedging Practices and Optimization Procedures

Hedging ILLB with NYMEX Contracts is an Imperfect Hedge

DP&L argues that NYMEX contracts are a financial hedge to mitigate adverse coal price movements. DP&L purchases liquid NYMEX contracts and then subsequently sells them primarily to purchase Illinois Basin coal. This practice is not a hedge against adverse fuel prices, but a hedge that the NYMEX coal will increase in value more than Illinois Basin prices. This is an imperfect hedge against adverse coal price movements. EVA believes DP&L understands that it is really hedging the market price differential between two coal types based on the following statement from the "Optimization Description" document provided, "the value spread of a quality or basin optimization can widen, diminish or even reverse based on market conditions that may affect one region or coal quality more than another."

Exhibit 4-13 illustrates the historical market prices of NYMEX and Illinois Basin coal from 2004 to 2010. Historical NYMEX and Illinois Basin prices are closely correlated (92%), but NYMEX prices are more volatile than Illinois Basin prices. Illinois Basin coal always follows the same pricing trend and is always valued less than Central Appalachia coal, although by a fluctuating amount. As a result, an optimization will always be positive when Central Appalachia coal is replaced with Illinois Basin coal. To use a simple analogy, this would be akin to a person hedging the price of gasoline they put into their car by purchasing premium gasoline now, storing it, and then selling it to purchase regular gasoline at some point in the future. Premium gasoline will always be greater than regular and both premium and regular gasoline prices will fluctuate at about the same rate.



Exhibit 4-13 Monthly Prompt Price of CAPP and ILLB Coal (\$/MMBtu)

While DP&L may not include either the original purchase price of the hedge in its optimization calculations or the price of the alternative coal in its optimization calculations, these prices are required to determine whether jurisdictional customers pay more or less as a result of using a combination of NYMEX contracts and optimizations.

The analysis performed on the decision not to this discussion.

As DP&L can almost always sell the NYMEX coal at a price greater than the Illinois Basin coal and receive an optimization credit, DP&L has locked in value for its shareholders at potentially a significant cost to ratepayers. EVA believes that given the historic premium for Central Appalachia coal, using NYMEX contracts with optimization will almost always increase the cost of coal to customers.

Exhibit 4-14 Relative Costs of

Not only does EVA not believe this is what the PUCO had in mind when it agreed to let DP&L retain 75 percent of the optimization values, EVA believes this is contrary to what DP&L said in its own application for the FUEL Rider. "No optimization transaction will take place unless the net effect of the transaction results in a net decrease of costs to the retail ratepayer."

There are Better Hedging Strategies for DP&L Than NYMEX Contracts

DP&L has argued that because of its uncertain load it has to purchase NYMEX contracts to insure supply but allow for liquidity if such supply is not needed. The reality is that, thus far, the fuel consumption at both Killen and Stuart has been remarkably stable with the change in customer mix. DP&L has not provided adequate demonstration of that uncertainty. Further, there are other strategies to obtain greater volume flexibility including volume options in contracts and staggered contract expirations. Finally, DP&L has not demonstrated that procuring its "uncertain" requirements on the open market at the time they are needed would not be lower cost than the current strategy.

The Optimizations are a Distraction to Procurement Personnel

DP&L fuel procurement personnel are evaluated upon their contributions to gains on the resale of coal. The first item in the list of goals for the Vice President and Director of Fuel are respectively

Further, with the FUEL Rider, the decisions made by fuel procurement personnel should be primarily for the benefit of jurisdictional customers. The risk that a motivation would be questioned is very high if there are potentially contradictory employee objectives.

There are Limited Incentives to Minimize the Price of NYMEX Purchases

Given DP&L's ability to recover its hedging costs through the FUEL Rider, DP&L has procured significant quantities of NYMEX in 2009 and 2010 **Sector Contracts**. There is no written strategy for the procurement of the NYMEX contracts, nor does DP&L consider non-NYMEX low sulfur coals as an alternative to the NYMEX contracts.

Conclusions and Recommendations Regarding Hedging Practices and Optimizations

EVA does not believe that DP&L has demonstrated that all of its optimizations have achieved a net decrease in costs to the retail ratepayer because its optimization analysis excludes the gain/loss on the sale and its optimization analysis does not consider what it could have acquired the high sulfur coal for if that coal had been purchased in the first place.

EVA recommends that in the future the optimization calculations include all of these factors and that optimization sharing should be limited to those circumstances in which the optimization actually reduces the cost of coal to retail customers.

DP&L should develop a hedging strategy that considers the type of coal it expects to burn and the quantity of that coal. To that end, DP&L should not enter into NYMEX hedges that exceed its expected low sulfur coal requirements and DP&L should enter into high sulfur contracts that hedge in a consistent manner its expected high sulfur coal consumption.

To the extent that DP&L wants to continue trading, it should separate the trading personnel from the personnel dedicated to the procurement of jurisdictional coal. The performance of personnel responsible for the procurement of jurisdictional coal should not be evaluated based upon their contributions to coal optimization margins.

5 PLANT PERFORMANCE

Benchmarking

The performance of the DP&L-operated coal plants can be measured against other coal-fired plants in the PJM Interconnection to determine how competitive these plants are at providing electricity to the power pool. This same comparison can be made to coal plants in Ohio and Kentucky which have similar fuel costs.

Two measures used to demonstrate plant performance are capacity factor and heat rate. Heat rate is the amount of energy used to generate one unit of electricity expressed in BTUs per kilowatt-hour. Capacity factor is the utilization rate of the plant or how many megawatt-hours were generated verses its potential generation. Capacity factor generally ties to the competitiveness of the plant.

The capacity factors of the three DP&L-operated plants compared to the other coal-fired plants in the PJM Interconnection are presented in Exhibit 5-1. Killen and Stuart are on the higher end of the curve, 84 percent and 73 percent, respectively. As noted in Section 1, Stuart's 2010 capacity factor was impaired by an extended outage in September. Hutchings had the lowest capacity factor of PJM coal units in 2010.

Exhibit 5-1 PJM Coal-Fired Power Capacity Factors in 2010



Killen and Stuart have lower heat rates compared to their PJM competitors (Exhibit 5-2). A lower heat rate conveys that a plant will use less fuel to produce a unit of electricity, therefore the plants marginal cost to produce electricity is lower and able to sell electricity at a more competitive rate into the power pool. Hutchings has a very high heat rate which is both caused by and the result of its low utilization.



Exhibit 5-2 PJM Coal-Fired Power Plant Heat Rates in 2010

Exhibit 5-3 displays the cumulative 2010 generation of PJM coal-fired plants by heat rate. Stuart's heat rate puts it in the bottom half. Killen with a slightly higher heat rate is further up.





The comparisons with capacity factor and heat rate are provided with Kentucky and Ohio coalfired plants respectively in Exhibits 5-4 and 5-5. Interestingly, the results are similar with the PJM population.



Exhibit 5-4 Ohio and Kentucky Coal-Fired Power Capacity Factors in 2010

Exhibit 5-5 Ohio and Kentucky Coal-Fired Power Plant Heat Rates in 2010



6 FINANCIAL AUDIT OF THE FUEL ADJUSTMENT CLAUSE RIDER (FUEL RIDER) COMPONENT

Organization

The section of the report concerning the Fuel Rider filings audit is organized into the following sections:

- Certificate of Accountability of Independent Auditors
- Background
- Stipulation from Case No. 08-1094-EL-SSO
- Accounts Included in FUEL Rider
- Initial FUEL Rider Rates
- Quarterly FUEL Rider Filings
- FUEL Rider Deferrals
- Other Fuel Handling Expense
- Improvement to Sales Forecasts
- Potential for a Terminal Undercollected Balance
- Minimum Review Requirements
- Jointly Owned Generation
- Review Related to Coal Order Processing
- Fuel Ledger
- BTU Adjustments
- Freight and Barge Vouchers
- Fuel Analysis Reports
- Retroactive Escalation
- Review Related to Station Visitation and Coal Processing Procedure
- Review Related to Fuel Supplies Owned or Controlled by the Company
- Review Related to Purchased Power

- Demurrage
- Review Related to Service Interruptions and Unscheduled Outages
- Audit Trail for FUEL Rider Filings, Supporting Workpapers and Documentation
- Renewable Energy
- Reconciliation Adjustment Audit Trail
- Optimization Trades
- Accounting for Emission Allowances
- Application of FUEL Rider Rates to Customer Bills
- Changes to Fuel, Purchased Power Procurement and Emission Allowance Procurement
- General Ledger Detail and Audit Trail
- Internal Audits
- Patriot Coal Supply Agreement
- Memorandum of Findings
- Summary of Recommendations

Certificate Of Accountability Of Independent Auditors

To: The Dayton Power & Light Company

We have examined the quarterly FUEL Rider filings of The Dayton Power & Light Company ("DP&L") for the year ended December 31, 2010, which support the calculations of the Fuel Rider rates for the 12-month period January through December 2010. In conducting our review, we were aware of and considered the guidance set forth in former Chapter 4901:1 – 11 and related appendices of the Ohio Administrative Code relating to "Uniform Financial Audit Program Standards and Specifications for the Electric Fuel Component". Our examination for this purpose was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants and, accordingly, included examining on a test basis, the accounting records and such other procedures as we considered necessary in the circumstances. We did not make a detailed examination as would be required to determine that each transaction was recorded in accordance with the financial procedural aspects of former Chapter 4901:1 – 11 and related appendices of the Ohio Administrative Code. Our examination does not provide a legal determination of DP&L's compliance with specific requirements.

The FUEL Rider filings are the responsibility of the Company's management. Our responsibility is to express an opinion as to DP&L's fair determination of the FUEL Rider rates for January through December 2010 calculated with those quarterly filings, which include the Reconciliation Adjustments for the period January through November 2010 that were reflected by DP&L through the Company's quarterly FUEL Rider filings.

In our opinion, except for the error corrections noted in this report, DP&L has determined, in all material respects, the FUEL Rider rates for the 12-month period January through December 2010, including the Reconciliation Adjustments for the period January through November 2010 in accordance with its proposed procedures and its interpretation of what should be includable in the FUEL Rider rates.

Larbin & associates PLLC

Larkin & Associates PLLC Livonia, Michigan

Background

On September 3, 2003, the Commission approved a stipulation extending DP&L's market development period to December 31, 2005, and provided for a rate stabilization plan ("RSP") from January 1, 2006 through December 31, 2008. Under the RSP, DP&L's fuel rate was fixed and included in the base retail generation rates. DP&L filed an application with the Commission on October 10, 2008 for a standard service offer ("SSO") in the form of an electric security plan ("ESP") as Case No. 08-1094-EL-SSO et al. The application was supplemented on December 5, 2008. A Stipulation was subsequently filed with the Commission on February 24, 2009. (See discussion below) In the Commissions' Opinion and Order dated June 24, 2009, the Commission authorized DP&L to implement a bypassable fuel recovery rider ("FUEL Rider") to become effective January 1, 2010. The Commission also determined that the Stipulation would freeze distribution rates through December 31, 2012; would ensure rate certainty through December 21, 2012, with limited, specific exceptions; and requires DP&L to implement energy efficiency and peak demand reduction programs in consultation with an energy efficiency collaborative.

Stipulation From Case No. 08-1094-EL-SSO

Certain provisions of the FUEL Rider were addressed in a stipulation reached in Case No. 08-1094-EL-SSO et al.

The following passages are from the Stipulation and Recommendation in Case No. 08-1094-EL-SSO et al., dated February 24, 2009 at paragraphs 1 and 2:

To assist in maintaining rate certainty, the parties agree to extend DP&L's current rate plan through December 31, 2012, except as expressly modified herein.

DP&L will implement a bypassable fuel recovery rider to recover retail fuel and purchased power costs, based on least cost fuel and purchased power being allocated to retail customer. To calculate the rider, jurisdictional emission allowance proceeds and twenty-five percent of jurisdictional coal sales gains will be netted against the fuel and purchased power costs. Retail customers for the purpose of this calculation include DP&L as well as DPL Energy Resource customers. The rider will initially be established at 1.97¢ per kWh, which amount will be subtracted from DP&L's residual generation rates. No later than November 1, 2009, DP&L will make a filing at the Commission to establish the fuel rider to become effective January 1, 2010. Thereafter, the Company shall file quarterly adjustments for recovery of the cost of fuel and purchased power. The Company's annual filing will be submitted during the first quarter of each year, beginning in 2011, and will be subject to due process, including audits and hearings (unless no signatory party objects to foregoing the hearing) for the twelve-month periods ending December 31, 2010 and 2011. The Company's annual filing shall include but not be limited to details substantiating all costs included in the fuel recovery rider during the prior calendar year so that Staff and interested parties can evaluate the methodology, account balances, forecasts, and substantiating support. Such audit shall be conducted by an independent third party auditor or Staff, at the Commission's discretion. If conducted by a third party: (a) the third party will be engaged by the report to staff; and (b) DP&L

will fund the audit and may seek cost recovery through the fuel recovery rider. DP&L will withdraw its request for deferral of fuel costs for 2009-2010.

Accounts Included In DP&L's FUEL Rider

As stated in the Company's Application to Establish a FUEL Rider, DP&L has interpreted the Stipulation and Order in Case No. 08-1094-EL-SSO et al to allow for the inclusion of costs from the following FERC accounts and types of costs in its quarterly FUEL Rider filings:

Fuel Costs. FERC Accounts 501 and 547 include the costs of fuel and transportation of fuel used for the generation of electricity. The majority of fuel handling costs at the plants is also recorded in Account 501. Gains and losses on fuel sales that are recorded into Account 456 and cleared through Account 501 were separately estimated as discussed below. The costs for disposal of fly ash are also recorded in FERC Account 501, but were excluded from the projected costs used to establish initial FUEL rates. The portion of the recorded costs for biomass and similar fuels that is higher than the equivalent cost of coal will be excluded from fuel calculations and recovered through the Alternative Energy Rider; the portion of these costs up to the equivalent cost of coal will be included in the fuel calculations for recovery through the FUEL rates.

Other Fuel Handling Costs. The portion of the costs recorded in FERC Accounts 403 and 512 that involve fuel handling equipment at the plants is included. This fuel handling activity allows the Company to manage the complexity of unloading, storing and blending the multiple fuel types that DP&L can now use. These costs are incurred to allow the Company to burn a wider range of fuels and to reduce the overall fuel cost to customers.

Purchased Power Costs and Related Transmission Not Otherwise Recovered. FERC Account 555 includes the cost of purchased power. FERC Account 565 includes electric transmission costs, including costs of transmission of power external to PJM to bring it to PJM (if any).

Emissions Allowances. FERC Account 509 records the costs of emission allowances. Currently this account includes sulfur dioxide (" SO_2 ") and nitrogen oxides ("NOx") emission allowance costs. Future legislation may add other types of allowance costs that would also be recorded in this account for recovery.

Gains and Losses. Gains and losses on purchased power are recorded in FERC Account 421 and 426. Gains and losses on the sale of coal and on the sale of heating oil futures used as a price hedge are recorded in FERC Account 456. Gains and losses on the sale of emission allowances are recorded in FERC Account 456. Accounts 411.8 and 411.9. The net proceeds of optimization transactions, where there is a sale of coal or power and a replacement purchase, are based on the price of coal or power sold, net of the cost of the replacement coal or power. The net proceeds of the jurisdictional share of optimization transactions are shared with 25% of the net proceeds being credited to retail customers based on the Stipulation provisions.

Reconciliation Adjustment Initially Set to Zero. Within future FUEL Rider quarterly filings, the amounts under-recovered or over-recovered will be assessed or returned to customers over time through a reconciliation adjustment, which will also include a component to reflect carrying costs or benefits at DP&L's weighted average debt rate as last set in Case No. 08-1094-EL-SSO. As of January 1, 2010, however, there is no over- or under-recovery and, thus, the reconciliation adjustment would be initially set at zero. DP&L has not actually recorded a carrying cost or benefit on the amounts under-recovered or over-recovered during this period.

Initial FUEL Rider Rates

Paragraph 2 of the February 24, 2009 Stipulation and Recommendation in Case No. 08-1094-EL-SSO et al states at page 4: "The rider will initially be established at 1.97 cents per kWh, which amount will be subtracted from DP&L's residual generation rates." Data request Onsite 44 asked DP&L to explain why the FUEL Rider rates implemented by DP&L effective January 1, 2010 were different from the 1.97 cents per kWh amount cited in the stipulation. The Company's response to Onsite 44(a) and (b) indicate that, at the time of the ESP settlement, the first quarter 2010 fuel rate was not known, however, the Stipulation did identify the amount to be removed from base generation rates. The Stipulation required DP&L to file by November 1, 2009 to establish the January 1, 2010 fuel rate. The Company stated that the 1.97 cents per kWh initial Fuel Rider rate was an agreed upon end-result by the parties signing the Stipulation with no defined computation method or agreement as to how the number was derived.

Quarterly FUEL Rider Filings

For the period 2010, DP&L made the following quarterly FUEL Rider filings:

Date Filed	Forecast Period Covered	<u>Reconciliation Adjustment</u> (Actual Period Covered)
October 30, 2009	January – February 2010	
February 1, 2010	March – May 2010	
April 30, 2010	June – August 2010	January – February 2010
July 30, 2010	September – November 2010	March – May 2010
November 4, 2010	December 2010 - February 2011	June – August 2010
January 31, 2011	March – May 2011	September – November 2011

Exhibit 6-1 2010 Quarterly FUEL Rider Filings

Larkin's review of DP&L's quarterly FUEL Rider filings covers the forecast periods encompassing calendar 2010. Our review also covers DP&L's calculations of the Reconciliation Adjustment (RA) components included within those quarterly FUEL Rider filings for the months of 2010. Larkin's review DP&L's RA information included verification to actual recorded results on a test basis for the months of January through November 2010. Additionally, we reviewed DP&L's actual recorded results for the month of December 2010.¹

Initial Quarterly FUEL Rider Filing – January and February 2010

On October 30, 2009, DP&L submitted its initial quarterly Fuel Rider filing which reflects forecasted data from January through February 2010. DP&L's filing included a submittal letter, Schedules 1 and 2, and Workpaper 1, which supports the Company's proposed calculations. With this initial filing, Schedule 2, which is the Company's Reconciliation Adjustment schedule, reflects a zero balance. On this schedule, DP&L included a footnote which states "This schedule will not be relevant until the June filing." As discussed in DP&L's Application dated October 30, 2009, at pages 4 and 5, the reconciliation adjustment reflects amounts under-recovered or over-recovered to be assessed or refunded to customers in DP&L's subsequent FUEL rider filings. However, as of January 1, 2010, there was no under-recovery or over-recovery, so the reconciliation adjustment is initially set to zero. The following sections discuss DP&L's Fuel Rider filings by reproducing Schedules 1 and 2 as well as Workpaper 1 as Exhibits 6-2 through 6-16.²

Exhibit 6-2

Forecasted Quarterly Rate Summary, January through February 2010

THE DAYTON POWER AND LIGHT COMPANY Case No. 09-1012-EL-UNC FUEL Rider Forecasted Quarterly Rate Summary

Line <u>No.</u> 1	(A) <u>Description</u> Forecasted FUEL Costs	(B) -	(C) <u>Jan-10</u> \$41,047,173	(D) <u>Feb-10</u> \$36,240,199	(E) <u>Total</u> \$77,287,371	(F) <u>Source</u>
2	Assigned to Off-System Sales		(\$7,113,805)	(\$7,243,424)	(\$14,357,229)	
3	Retail Costs		\$33,933,368	\$28,996,77 4	\$62,930,142	Line 1 - Line 2
4	Forecasted Generation Level Retail Sales		1,445,326,586	1,195,140,000	2,640,466,586	Workpaper 1, Line 18
5	Retail FUEL Rate before Reconciliation Adjustment \$/kWh				\$0.0238330	Line 3 / Line 4
6	Reconciliation Adjustment \$/kWh				\$0.000000	Schedule 2, Line 5
7	Forecasted Retail FUEL Rate \$/kWh				\$0.0238330	Line 5 + Line 6
8	FUEL Rates at Distribution Level: Distribution Line Loss Factors FUEL Rates SkWh		High Voltage <u>& Substation</u> 1.00583 \$0.0239719	<u>Primary</u> 1.01732 \$0.0242458	Secondary & <u>Residential</u> 1.04687 \$0.0249501	Line 7 * Line 8

Schedule 1: This schedule reflects DP&L's estimates of the monthly fuel costs it expected to incur during the period January through February 2010. As shown on lines 1-3 of Schedule 1, the categories included DP&L's forecasted fuel costs for January and

² As noted above, DP&L's Reconciliation Adjustment was initially set to zero, so Schedule 2 is not reproduced in our report until the RA component began appearing in DP&L's quarterly FUEL Rider filings.

¹ Note that, at the time of our review of December 2010, DP&L had not yet filed an RA for December 2010 in a quarterly FUEL Rider filing.

February, which totaled \$77.287 million (column E), less amounts assigned to Off-System Sales which totaled \$14.357 million, which resulted in forecasted net Retail Costs of \$62.930 million. As shown on line 4 of Schedule 1, the Company included its forecasted Generation Level Retail Sales, which totaled 2.640 billion kWh for the period January through February 2010. The Company then calculated its retail fuel rate before Reconciliation Adjustment of \$0.0238330 per kWh by dividing the net Retail Costs of \$62.930 million by the forecasted Generation Level Retail Sales as shown on line 5. As noted above, DP&L will not have a reconciliation adjustment until its FUEL rider filing for the period June through August 2010. Therefore, line 6, which is the Reconciliation Adjustment line, is set to zero. Since there is no reconciliation adjustment in this initial filing, the Forecasted Retail Fuel Rate is \$0.0238330 per kWh as shown on line 7. Finally, the Company applied Distribution Line Loss Factors to its Forecasted Retail Fuel rate, which is based on voltage levels in order to derive the fuel rates at the distribution level³. As shown on line 8, these line loss factors are 1.00583, 1.01732 and 1.04687 cents per kWh for High Voltage & Substation, Primary and Secondary & Residential voltage levels, respectively. The application of these line loss factors results in fuel rates at the distribution level of \$0.0239719, \$0.0242458 and \$0.0249501 cents per kWh as shown on line 9.

Because the Company's Reconciliation Adjustment was initially set to zero, Schedule 2 from DP&L's initial FUEL rider filing is not reproduced here.

Report of the Management/Performance and Financial Audit of the Fuel Purchased Power Rider of The Dayton Power and Light Company (09-1012-EL-EFC)

³ In 2009, DP&L conducted a line loss study to determine average loss factors to account for line losses on metered sales across voltage levels.

Exhibit 6-3 Forecasted Quarterly Rate – Workpaper 1, January through February 2010

THE DAYTON POWER AND LIGHT COMPANY Case No. 09-1012-EL-UNC

FUEL Rider

Line	(A)	(B)	(C)	(D)	(E)
<u>No.</u>	Description	-	<u>Jan-10</u>	Feb-10	• <u>Total</u>
	Forecasted Costs (\$) ¹				
1	Steam Plant Generation (501)		\$36,425,856	\$32,310,052	\$68,735,908
2	Steam Plant Fuel Oil Consumed (501)		\$516,401	\$650,035	\$1,166,436
3	Steam Plant Fuel Handling (501)		\$577,207	\$555 233	\$1,132,440
4	Steam Plant Gas Consumed (501)		\$53,970	\$44,940	\$98,910
5	Maintenance on Coal Handling Equipment (512)		\$391,524	\$580,591	\$972,115
6	Depreciation Expense on Coal Handling Equipment (403)		\$151,303	\$146,147	\$297,451
7	Coal Sales (456)		(\$1,838,939)	(\$1,844,896)	(\$3,683,835)
8	System Optimization		\$1,005,092	\$1,005,092	\$2,010,184
9	Heating Oil Realized Gains or Losses (456)		(\$107,193)	(\$104,883)	(\$212,076)
10	Allowances Consumed (509)		\$490	\$443	\$933
11	Cost of Fuel, Gas and Diesel Peakers (547)		\$224,504	\$65,698	\$290,202
12	Purchased Power (555)		\$4,435,145	\$3,543,559	\$7,978,704
13	Purchased Power Realized Gain/Losses (421 & 426)		\$0	\$0	\$0
14	Allowance Sales (411.8 & 411.9)		<u>(\$788,187)</u>	<u>(\$711,813)</u>	<u>(\$1,500,000)</u>
15	Total Costs		\$41,047,173	\$36,240,199	\$77,287,371
16	Assigned to Off-System Sales ¹		<u>(\$7,113,805)</u>	<u>(\$7,243,424)</u>	<u>(\$14,357,229)</u>
17	Retail Costs		\$33,933,368	\$28,996,774	\$62,930,142
18	Total Forecasted Generation Level Retail Sales ¹		1,445,326,586	1,195,140,000	2,640,466,586
19	Retail FUEL Rate \$/kWh			:	\$0.0238330
	······	Distribu	tion Loss Factor ²	Rate at Distri	bution Level
20	High Voltage & Substation		1.00583	\$0.023	9719
21	Primary		1.01732	\$0.024	2458
22	Secondary & Residential		1.04687	\$0.024	9501
				First Ouarter	FUEL Rider
	Standard Offer Metered Level Sales and Revenue Forecast			kWh	Revenue \$
23	High Voltage & Substation			61,258,044	\$1,468,472
24	Primary			367,133,562	\$8,901,447
25	Secondary & Residential			<u>1,909,715,741</u>	\$47,647,599
26	Total			2,338,107,347	\$58,017,517

Notes: ¹ Data from Corporate Model

² Distribution Loss Factors from 2009 Line Loss Study

Workpaper 1: Column A of this workpaper (lines 1-14) reflects a breakout of the categories of the forecasted costs that the Company has included in its Fuel Rider. Columns C and D provide a breakout of the forecasted amounts associated with each expense category for January and February 2010, respectively, and which totals the \$77.287 million shown on Schedule 1. Lines 16 through 19 of Workpaper 1 reflect the forecasted amounts shown on Schedule 1 for DP&L's off-system sales, retail costs, forecasted generation sales and retail fuel rate. Lines 20 through 22 of Workpaper 1 reflect the distribution line loss factors and forecasted fuel rates at the distribution level, which are shown on Schedule 1 at lines 8 and 9, respectively. Finally, lines 23 through 26 of Workpaper 1 reflect a breakout of DP&L's standard offer metered level sales and revenue forecast. Specifically, Column D reflects forecasted kWh for the High Voltage

& Substation, Primary and Secondary & Residential voltage levels of 61.258 million kWh, 367.134 million kWh and 1.910 billion kWh, respectively. The Company's forecast totals 2.338 billion kWh as shown on line 26. Column E of Workpaper 1 reflects the Company's forecasted Fuel Rider revenue for each voltage level, which was calculated by multiplying the kWh associated with each of the voltage levels referenced above by the forecasted fuel rates at the distribution level. The Company's forecasted Fuel Rider totals \$58.018 million as shown on line 26.

Quarterly FUEL Rider Filing – March through May 2010

Exhibit 6-4 Forecasted Quarterly Rate Summary, March through May 2010 THE DAYTON POWER AND LIGHT COMPANY Case No. 09-1012-ELFAC

Forec	asted Quarterly R	ate Summary			
(A) <u>Description</u> Forecasted FUEL Costs	(B) <u>Mar-10</u> \$41,837,330	(C) <u>Apr-10</u> \$32,291,789	(D) <u>May-10</u> \$36,501,472	(E) <u>Total</u> \$110,630,590	(F) <u>Source</u>
Assigned to Off-System Sales	<u>(\$14,900,990)</u>	(\$8,171.608)	(\$10,088,476)	(\$33.161.074)	Ŀ
Retail Costs	\$26,936,339	\$24,120,181	\$26,412,996	\$77,469,516	Line 1 - Line 2
Forecasted Generation Level Retail Sales	1,142,655,000	983,633,000	1,049,020,000	3,175,308,000	Workpaper 1, Line 18
Retail FUEL Rate before Reconciliation Adjustment \$/kWb				\$0.0243975	Line 3 / Line 4
Reconciliation Adjustment \$/kWh				\$0.0000000	Schedule 2, Line 5
Forecasted Retail FUEL Rate \$/kWh				\$0.0243975	Line 5 + Line 6
FUEL Rates at Distribution Level: Distribution Line Loss Factors		High Voltage <u>& Substation</u> 1.00583	Primary 1.01732	Secondary & <u>Residential</u> 1.04687	-
	(A) <u>Description</u> Forecasted FUEL Costs Assigned to Off-System Sales Retail Costs Forecasted Generation Level Retail Sales Retail FUEL Rate before Reconciliation Adjustment \$/kWh Reconciliation Adjustment \$/kWh Forecasted Retail FUEL Rate \$/kWh <u>FUEL Rates at Distribution Level:</u> Distribution Line Loss Factors FUEL Rates \$/kWh	Forecasted Quarterly Rates Skitch Quarterly Rates (A) (B) Description Mar-10 Forecasted FUEL Costs \$41,837,330 Assigned to Off-System Sales (\$14,900,990) Retail Costs \$26,936,339 Forecasted Generation Level Retail Sales 1,142,655,000 Retail FUEL Rate before Reconciliation Adjustment \$/kWh Reconciliation Adjustment \$/kWh Forecasted Retail FUEL Rate \$/kWh FUEL Rates at Distribution Level: Distribution Line Loss Factors FUEL Rates \$AWh	Forecasted Quarterly Rate Summary (A) (B) (C) Description Mar-10 Apr-10 Forecasted FUEL Costs \$41,837,330 \$32,291,789 Assigned to Off-System Sales (\$14,900,990) (\$8,171,608) Retail Costs \$26,936,339 \$24,120,181 Forecasted Generation Level Retail Sales 1,142,655,000 983,633,000 Retail FUEL Rate before Reconciliation Adjustment \$/kWh Reconciliation Adjustment \$/kWh Forecasted Retail FUEL Rate \$/kWh High Voltage FUEL Rates at Distribution Level: \$40,0383 Distribution Line Loss Factors \$0,0245397 FUEL Rates \$/kWh \$0,0245397	Forecasted Quarterly Rate Summary (A) (B) (C) (D) Description Mar-10 Apr-10 May-10 Forecasted FUEL Costs \$41,837,330 \$32,291,789 \$36,501,472 Assigned to Off-System Sales (\$14,900,990) (\$8,171,608) (\$10,088,476) Retail Costs \$26,936,339 \$24,120,181 \$26,412,996 Forecasted Generation Level Retail Sales 1,142,655,000 983,633,000 1,049,020,000 Retail FUEL Rate before Reconciliation Adjustment \$/kWh Forecasted Retail FUEL Rate \$/kWh Forecasted Retail FUEL Rate \$/kWh FUEL Rates at Distribution Level: High Voltage & Substation Primary Distribution Line Loss Factors 1,00583 1,01732 \$9,0243397 \$9,0243397	Forecasted Quarterly Rate Summary (A) (B) (C) (D) (E) Description Mar-10 Apr-10 May-10 Total Forecasted FUEL Costs \$41,837,330 \$32,291,789 \$36,501,472 \$110,630,590 Assigned to Off-System Sales (\$14,900,990) (\$8,171,608) (\$10,088,476) (\$33,161,074) Retail Costs \$26,936,339 \$24,120,181 \$26,412,996 \$77,469,516 Forecasted Generation Level Retail Sales 1,142,655,000 983,633,000 1,049,020,000 3,175,308,000 Retail FUEL Rate before Reconciliation Adjustment \$/kWh \$0.0243975 \$0.0243975 Reconciliation Adjustment \$/kWh \$0.0243975 \$0.0243975 Proceasted Retail FUEL Rate \$/kWh \$0.0243975 \$0.0243975 Distribution Line Loss Factors \$0.0243975 \$0.0243975 FUEL Rates \$/kWh

Schedule 1: This schedule reflects DP&L's estimates of the monthly fuel costs it expected to incur during the period March through May 2010. As shown on lines 1-3 of Schedule 1, the categories included DP&L's forecasted fuel costs for March, April and May, which totaled \$110.631 million (column E), less amounts assigned to Off-System Sales which totaled \$33.161 million, which resulted in forecasted net Retail Costs of \$77.470 million. As shown on line 4 of Schedule 1, the Company included its forecasted Generation Level Retail Sales, which totaled 3.175 billion kWh for the period March through May 2010. The Company then calculated its retail fuel rate before Reconciliation Adjustment of \$0.0243975 per kWh by dividing the net Retail Costs of \$77.470 million by the forecasted Generation Level Retail Sales as shown on line 5. For the reason noted in its initial quarterly Fuel Rider filing, DP&L did not reflect a reconciliation adjustment in its March through May 2010 filing. Therefore, the Reconciliation Adjustment is still set to zero as shown on line 6. Since there is no reconciliation adjustment in this filing, the Forecasted Retail Fuel Rate is \$0.0243975 per kWh as shown on line 7. Similar to its initial filing, as shown on line 8, the Company reflected the line loss factors of 1.00583, 1.01732 and 1.04687 cents per kWh for the High Voltage & Substation, Primary and Secondary & Residential voltage levels, respectively. The application of these line loss factors results in fuel rates at the

distribution level of \$0.0245397, \$0.0248201 and \$0.0255410 cents per kWh as shown on line 9.

Since the Company's Reconciliation Adjustment was set to zero in this quarterly filing, Schedule 2 is not reproduced here.

Exhibit 6-5 Forecasted Quarterly Rate – Workpaper 1, March through May 2010

THE DAYTON POWER AND LIGHT COMPANY Case No. 09-1012-EL-FAC

TIFI Rider

Line		(B)	(C)	መ	(E)
No.	Description	(2) Mar-10	Apr-10	May-10	Total
	Forecasted Costs (S) ¹	<u>,</u>			
1	Steam Plant Generation (501)	\$36 880.465	\$27,822,190	\$29,526,657	\$94,229,312
2	Steam Plant Fuel Oil Consumed (501)	\$568,435	\$419.302	\$917,934	\$1,905,671
3	Steam Plant Fuel Handling (501)	\$560,419	\$684,698	\$457,108	\$1,702,225
4	Steam Plant Gas Consumed (501)	\$64,160	\$37.490	\$41.610	\$143,260
5	Maintenance on Coal Handling Equipment (512)	\$356,400	\$200,718	\$505,662	\$1,062,779
6	Depreciation Expense on Coal Handling Equipment (403)	\$166.529	\$208,960	\$132,258	\$507,747
7	Coal Sales (456)	(\$280,156)	(\$929,743)	(\$527,942)	(\$1,737,841)
8	System Optimization	\$502,546	\$502,546	\$502,546	\$1,507,638
9	Heating Oil Realized Gains or Losses (456)	\$285,687	\$86,394	\$83,963	\$456,044
10	Allowances Consumed (509)	\$549	\$439	\$405	\$1,393
11	Cost of Fuel, Gas and Diesel Peakers (547)	\$171,238	\$65,698	\$65,698	\$302,634
12	Purchased Power (555)	\$3,307,185	\$3,946,970	\$4,795,573	\$12,049,728
13	Purchased Power Realized Gain/Losses (421 & 426)	\$0	\$0	\$0	\$0
14	Allowance Sales (411.8 & 411.9)	(\$746,127)	<u>(\$753,873)</u>	<u>\$0</u>	(\$1,500,000)
15	Total Costs	\$41,837,330	\$32,291,789	\$36,501,472	\$110,630,590
16	Assigned to Off-System Sales ¹	(\$14,900,990)	(\$8,171,608)	(\$10,088,476)	(\$33,161,074)
17	Retail Costs	\$26,936,339	\$24,120,181	\$26,412,996	\$77,469,516
18	Total Forecasted Generation Level Retail Sales ¹	1,142,655,000	983,633,000	1,049,020,000	3,175,308,000
19	Retail FUEL Rate \$/kWh				\$0.0243975
		Distribution L	oss Factor ²	Rate at Distri	bution Level
20	High Voltage & Substation	1.005	83	\$0.024	5397
21	Primary	1.01732		\$0.024	8201
22	Secondary & Residential	1.046	87	\$0.025	5410
				Spring 2010	FUEL Rider
	Standard Offer Metered Level Sales and Revenue Forecast			kWh	Revenue \$
22	771-1.37.14			05 1/7 250	PO 336 370

		Spring 2010 1	OLE MUCI
	Standard Offer Metered Level Sales and Revenue Forecast	<u>kWb</u>	Revenue \$
23	High Voltage & Substation	95,167,358	\$2,335,378
24	Primary	581,766,593	\$14,439,505
25	Secondary & Residential	<u>2.070,982,133</u>	<u>\$52,894,955</u>
26	Total	2,747,916,084	\$69,669,83 8

Workpaper 1: Column A of this workpaper (lines 1-14) reflects a breakout of the categories of the forecasted costs that the Company has included in its Fuel Rider for the period March through May 2010. Columns B, C and D provide a breakout of the forecasted amounts associated with each expense category for March, April and May 2010, respectively, and which totals the \$110.631 million shown on Schedule 1. Lines 16 through 19 of Workpaper 1 reflect the forecasted amounts shown on Schedule 1 for DP&L's off-system sales, retail costs, forecasted generation sales and retail fuel rate. Lines 20 through 22 of Workpaper 1 reflect the distribution line loss factors and forecasted fuel rates at the distribution level, which are shown on Schedule 1 at lines 8

and 9, respectively. Finally, lines 23 through 26 of Workpaper 1 reflect a breakout of DP&L's standard offer metered level sales and revenue forecast. Specifically, Column D reflects forecasted kWh for the High Voltage & Substation, Primary and Secondary & Residential voltage levels of 95.167 million kWh, 581.767 million kWh and 2.071 billion kWh, respectively. The Company's forecast totals 2.748 billion kWh as shown on line 26. Column E of Workpaper 1 reflects the Company's forecasted Fuel Rider revenue for each voltage level, which was calculated by multiplying the kWh associated with each of the voltage levels referenced above by the forecasted fuel rates at the distribution level. The Company's forecasted Fuel Rider totals \$69.670 million as shown on line 26.

Quarterly FUEL Rider Filing – June through August 2010 Exhibit 6-6 Forecasted Quarterly Rate Summary, June through August 2010 THE DAYTON POWER AND LIGHT COMPANY Case No. 09-1012-EL-FAC FITEL Rider Forecasted Quarterly Rate Summary Line (B) (C)(D) æ Œ (A) Description <u>Jun-10</u> <u>Jul-10</u> <u>Aug-10</u> <u>Total</u> Source No. Forecasted FUEL Costs \$43,334,798 \$43,986,276 \$125,344,983 1 \$38,023,910 2 Assigned to Off-System Sales (\$8,237,874) (\$7.961.751) (\$9.833.773) (\$26.033.398) 3 Retail Costs \$34,152,503 \$99,311,585 Line 1 - Line 2 \$29,786,036 \$35,373,047 1,170,727,538 1,392,228,714 1,347,165,683 3,910,121,935 Workpaper 1, Line 18 4 Forecasted Generation Level Retail Sales \$0.0253986 Line 3 / Line 4 5 Retail FUEL Rate before Reconciliation Adjustment \$/kWh \$0,0008252 Schedule 2, Line 5 6 Reconciliation Adjustment \$/kWh Forecasted Retail FUEL Rate \$/kWh \$0.0262238 Line 5 + Line 6 High Voltage Secondary & Residential FUEL Rates at Distribution Level: & Substation Primary 8 Distribution Line Loss Factors 1.00583 1.01732 1.04687 \$0.0266780 FUEL Rates \$/kWh \$0.0263767 \$0.0274529 Line 7 * Line 8 ٥

Schedule 1: This schedule reflects DP&L's estimates of the monthly fuel costs it expected to incur during the period June through August 2010. As shown on lines 1-3 of Schedule 1, the categories included DP&L's forecasted fuel costs for March, April and May, which totaled \$125.345 million (column E), less amounts assigned to Off-System Sales which totaled \$26.033 million, which resulted in forecasted net Retail Costs of \$99.312 million. As shown on line 4 of Schedule 1, the Company included its forecasted Generation Level Retail Sales, which totaled 3.910 billion kWh for the period June through August 2010. The Company then calculated its retail fuel rate before Reconciliation Adjustment of \$0.0253986 per kWh by dividing the net Retail Costs of \$99.312 million by the forecasted Generation Level Retail Sales as shown on line 5. As noted above, the Company has a Reconciliation Adjustment for the period January through February 2010 (see Schedule 2 discussion below). Therefore, as shown on line 6, DP&L has reflected a Reconciliation Adjustment in the amount of \$0.0008252 per kWh. DP&L added its Reconciliation Adjustment to the \$0.0253986 per kWh noted above to derive its forecasted retail fuel rate of \$0.0262238 per kWh as shown on line 7 of Schedule 1. After applying the line loss factors of 1.00583, 1.01732 and 1.04687 cents per kWh for the High Voltage & Substation, Primary and Secondary & Residential

voltage levels, the Company calculated fuel rates at the distribution level of \$0.0263767, \$0.0266780 and \$0.0274529 cents per kWh as shown on line 9.

Exhibit 6-7 Reconciliation Adjustment – January through February 2010 THE DAYTON POWER AND LIGHT COMPANY Case No. 09-1012-EL-FAC FUEL Rider Reconciliation Adjustment (RA) Line **(F)** (A) (B) (C) (D) **(E)** <u>No.</u> Description Jan-10 Feb-10 Total Source \$57,928,682 1 Actual Fuel Cost \$31,312,355 \$26,616,327 2 Actual Revenue Recovery (\$25,533,366) (\$29,818,488) (\$55,351,854) 3 Under (Over) Recovery \$2,576,828 Line 1 + Line 2 <u>Jun-10</u> <u>Jul-10</u> Aug-10 Forecasted Sales 1,137,846,241 1,074,894,158 4 910,033,457 3,122,773,856 5 Forecasted RA Rate S/kWh \$0.0008252

Schedule 2: Line 1 of Schedule 2 reflects DP&L's actual fuel costs that were incurred during January and February 2010, which totaled \$57.929 million (column E). Line 2 of Schedule 2 reflects DP&L's actual revenues for the same period, which totaled \$55.352 million. The difference between the Company's actual fuel costs and actual revenues results in an under-recovery in the amount of \$2.577 million as shown on line 3. Line 4 of Schedule 2 reflects DP&L's forecasted sales for the period June through August 2010, which total \$3.123 billion (column E). The Company derived its Reconciliation Adjustment of \$0.0008252 per kWh (shown on Schedule 1, line 6) by dividing the under-recovery of \$2.577 million by its forecasted sales for the period June through August 2010.

Exhibit 6-8 Forecasted Quarterly Rate – Workpaper 1, June through August 2010

THE DAYTON POWER AND LIGHT COMPANY Case No. 09-1012-EL-FAC

FUEL Rider

Line	(A)	(B)	(C)	(D)	(E)
<u>No.</u>	Description	<u>Jun-10</u>	<u>Jul-10</u>	<u>Aug-10</u>	Total
	Forecasted Costs (\$) ¹				
1	Steam Plant Generation (501)	\$30,116,270	\$33,566,500	\$34,373,900	\$98,056,670
2	Steam Plant Fuel Oil Consumed (501)	\$659,797	\$615,822	\$666,499	\$1,942,118
3	Steam Plant Fuel Handling (501)	\$515,972	\$502,782	\$508,377	\$1,527,131
4	Steam Plant Gas Consumed (501)	\$29,150	\$52,500	\$55,440	\$137,090
5	Maintenance on Coal Handling Equipment (512)	\$366,563	\$327,695	\$364,050	\$1,058,307
6	Depreciation Expense on Coal Handling Equipment (403)	\$160,758	\$152,178	\$153,173	\$466,110
7	Coal Sales (456)	(\$981,980)	(\$663,293)	(\$621,272)	(\$2,266,545)
8	System Optimization	\$502,546	\$502,546	\$502,546	\$1,507,638
9	Heating Oil Realized Gains or Losses (456)	\$435,890	\$88,270	\$125,570	\$649,730
10	Allowances Consumed (509)	\$0	\$0	\$0	\$0
11	Cost of Fuel, Gas and Diesel Peakers (547)	\$536,535	\$894,569	\$713,269	\$2,144,374
12	Purchased Power (555)	\$5,682,409	\$7,295,228	\$7,144,724	\$20,122,361
13	Purchased Power Realized Gain/Losses (421 & 426)	\$0	\$0	\$0	\$0
14	Allowance Sales (411.8 & 411.9)	\$0	\$0	\$0	<u>\$0</u>
15	Total Costs	\$38,023,910	\$43,334,798	\$43,986,276	\$125,344,983
16	Assigned to Off-System Sales ¹	(\$8,237,874)	(\$7,961,751)	(\$9,833,773)	(\$26,033,398)
17	Retail Costs	\$29,786,036	\$35,373,047	\$34,152,503	\$99,311,585
18	Total Forecasted Generation Level Retail Sales	1,170,727,538	1,392,228,714	1,347,165,683	3,910,121,935
19	Retail FUEL Rate \$/kWh				\$0.0253986
	Reconciliation Adjustment				
20	Under (Over) Recovery				\$2,576,828
21	Forecasted RA Rate \$/kWh				\$0.0008252
	Line Loss Adjustment	Distribution	Loss Factor ²	Rate at Distribu	tion Level
22	High Voltage & Substation	1 00	583	\$0,02637	67
23	Primary	1 01	732	\$0.02667	80
24	Secondary & Residential	1.04	687	\$0.02745	29
				Summer 2010 F	LIEL Rider
	Standard Offer Metered Level Sales and Revenue Forecast			kWh	Revenue S
25	High Voltage & Substation			78.303.904	\$2,065,399

High Voltage & Substation 25

26 Primary

27 Secondary & Residential

28 Total

Workpaper 1: Column A of this workpaper (lines 1-14) reflects a breakout of the categories of the forecasted costs that the Company has included in its Fuel Rider for the period June through August 2010. Columns B, C and D provide a breakout of the forecasted amounts associated with each expense category for March, April and May 2010, respectively, and which totals the \$125.345 million shown on Schedule 1. Lines 16 through 19 of Workpaper 1 reflect the forecasted amounts shown on Schedule 1 for DP&L's off-system sales, retail costs, forecasted generation sales and retail fuel rate. Lines 20 and 21 of Workpaper 1 reflect the under-recovery of \$2.577 million and the forecasted RA rate of \$0.0008252 per kWh. Lines 22 through 24 of Workpaper 1 reflect the distribution line loss factors and forecasted fuel rates at the distribution level, which are shown on Schedule 1 at lines 8 and 9, respectively and were calculated by multiplying DP&L's forecasted retail fuel rate by each of the distribution line loss factors. Lines 25 through 28 of Workpaper 1 reflect a breakout of DP&L's standard offer metered level sales and revenue forecast. Specifically, Column D reflects forecasted kWh for the High Voltage & Substation, Primary and Secondary & Residential voltage levels of 78.304

\$13,610,889

\$66,214,690

\$81,890,977

510,191,503

<u>2,411,937,892</u>

3,000,433,299

million kWh, 510.192 million kWh and 2.412 billion kWh, respectively. The Company's forecast totals 3.000 billion kWh as shown on line 28. Column E of Workpaper 1 reflects the Company's forecasted Fuel Rider revenue for each voltage level, which was calculated by multiplying the kWh associated with each of the voltage levels referenced above by the forecasted fuel rates at the distribution level. The Company's forecasted Fuel Rider totals \$81.891 million as shown on line 28.

Quarterly FUEL Rider Filing – September through November 2010

Exhibit 6-9

Forecasted Quarterly Rate Summary, September through November 2010

	THE DAYTON POWER AND LIGHT COMPANY Case No. 09-1012-EL-FAC FUEL Rider Forecasted Quarterly Rate Summary					
Line <u>No.</u> 1	(A) <u>Description</u> Forecasted FUEL Costs	(B) <u>Sep-10</u> \$37,196,933	(C) <u>Oct-10</u> \$35,813,026	(D) <u>Nov-10</u> \$37,070,411	(E) <u>Total</u> \$110,080,369	(F) <u>Source</u>
2	Assigned to Off-System Sales	<u>(\$9,886,241)</u>	<u>(\$9,976,273)</u>	<u>(\$9,022,729)</u>	(\$28,885,243)	
3	Retail Costs	\$27,310,692	\$25,836,753	\$28,047,682	\$81,195,126	Line 1 + Line 2
4	Forecasted Generation Level Retail Sales	1,121, 475,694	1,056,318,878	1,142,806,896	3,320,601,468	Workpaper 1, Line 18
5	Retail FUEL Rate before Reconciliation Adjustment \$/kWh				\$0.0244519	Line 3 / Line 4
6	Reconciliation Adjustment \$/kWh				\$0.0013220	Schedule 2, Line 5
7	Forecasted Retail FUEL Rate \$/kWh				\$0.0257739	Line 5 + Line 6
8	FUEL Rates at Distribution Level: Distribution Line Loss Factors FUEL Rates SheWh		High Voltage <u>& Substation</u> 1.00583 \$0.0259242	Primary 1.01732 \$0.0262203	Secondary & <u>Residential</u> 1.04687 \$0.0269819	Line 7 * Line 8

FUEL Rates \$/kWh

Schedule 1: This schedule reflects DP&L's estimates of the monthly fuel costs it expected to incur during the period September through November 2010. As shown on lines 1-3 of Schedule 1, the categories included DP&L's forecasted fuel costs for September, October and November, which totaled \$110.080 million (column E), less amounts assigned to Off-System Sales which totaled \$28.885 million, which resulted in forecasted net Retail Costs of \$81.195 million. As shown on line 4 of Schedule 1, the Company included its forecasted Generation Level Retail Sales which totaled 3.321 billion kWh for the period September through November 2010. The Company then calculated its retail fuel rate before Reconciliation Adjustment of \$0.0244519 per kWh by dividing the net Retail Costs of \$81.195 million by the forecasted Generation Level Retail Sales as shown on line 5. The Company reflected a Reconciliation Adjustment for the period March through May 2010 (see Schedule 2 discussion below) of \$0.0013220 per kWh on line 6. DP&L added its Reconciliation Adjustment to the \$0.0244519 per kWh noted above to derive its forecasted retail fuel rate of \$0.0257739 per kWh as shown on line 7 of Schedule 1. After applying the line loss factors of 1.00583, 1.01732 and 1.04687 cents per kWh for the High Voltage & Substation, Primary and Secondary & Residential voltage levels, the Company calculated fuel rates at the distribution level of \$0.0259242, \$0.0262203 and \$0.0269819 cents per kWh as shown on line 9.

Exhibit 6-10 Reconciliation Adjustment – March through May 2010

THE DAYTON POWER AND LIGHT COMPANY Case No. 09-1012-EL-FAC FUEL Rider Reconciliation Adjustment (RA)

Line **(F)** (A) **(B)** (C) (D) (E) Description Mar-10 Apr-10 <u>Total</u> Source <u>No.</u> May-10 1 Actual Fuel Cost \$24,181,194 \$19,612,608 \$19,716,657 \$63,510,459⁸ Actual Revenue Recovery (\$24,198,968) (\$19,523,305) (\$17,010,005) (\$60,732,278) 2 Under (Over) Recovery \$2,778,180 Line 1 + Line 2 3 <u>Sep-10</u> Oct-10 Nov-10 Forecasted Sales 720.921.956 649,963,096 730.649.068 4 2,101,534,120

5 Forecasted RA Rate \$/kWh

\$0.0013220

Schedule 2: Line 1 of Schedule 2 reflects DP&L's actual fuel costs that were incurred during March through May 2010, which totaled \$63.510 million (column E). Line 2 of Schedule 2 reflects DP&L's actual revenues for the same period, which totaled \$60.732 million. The difference between the Company's actual fuel costs and actual revenues results in an under-recovery in the amount of \$2.778 million as shown on line 3. Line 4 of Schedule 2 reflects DP&L's forecasted sales for the period September through November 2010, which total \$2.102 billion (column E). The Company derived its Reconciliation Adjustment of \$0.0013220 per kWh (shown on Schedule 1, line 6) by dividing the under-recovery of \$2.778 million by its forecasted sales for the period September through September through November 2010.

Exhibit 6-11 Forecasted Quarterly Rate – Workpaper 1, September through November 2010

THE DAYTON POWER AND LIGHT COMPANY Case No. 09-1012-EL-FAC

FUEL Rider

Line	(A)	(B)	(C)	(D)	(E)
<u>No.</u>	Description	Sep-10	Oct-10	<u>Nov-10</u>	<u>Total</u>
	Forecasted Costs (\$) ¹				
1	Steam Plant Generation (501)	\$30,186,081	\$28,989,510	\$29,028,097	\$88,203,689
2	Steam Plant Fuel Oil Consumed (501)	\$556,440	\$504,160	\$664,670	\$1,725,270
3	Steam Plant Fuel Handling (501)	\$560,628	\$568,723	\$544,446	\$1,673,796
4	Steam Plant Gas Consumed (501)	\$11,920	\$4,890	\$3,770	\$20,580
5	Maintenance on Coal Handling Equipment (512)	\$311,750	\$252,831	\$338,841	\$903,422
6	Depreciation Expense on Coal Handling Equipment (403)	\$179,266	\$177,015	\$170,694	\$526,975
7	Coal Sales (456)	(\$1,023,240)	(\$1,117,261)	(\$1,018,456)	(\$3,158,957)
8	System Optimization	\$603,955	\$628,007	\$628,007	\$1,859,969
9	Heating Oil Realized Gains or Losses (456)	\$34,780	\$10,600	\$14,640	\$60,020
10	Allowances Consumed (509)	\$0	\$0	50	\$0
11	Cost of Fuel, Gas and Diesel Peakers (547)	\$102,140	\$65,698	\$65,698	\$233,536
12	Purchased Power (555)	\$5,673,213	\$5,728,853	\$6,630,004	\$18,032,069
13	Purchased Power Realized Gain/Losses (421 & 426)	\$0	\$0	50	\$0
14	Allowance Sales (411.8 & 411.9)	<u>\$0</u>	<u>\$0</u>	<u>so</u>	<u>\$0</u>
15	Total Costs	\$37,196,933	\$35,813,026	\$37,070,411	\$110,080,369
16	Assigned to Off-System Sales ¹	(\$9,886,241)	(\$9,976,273)	(\$9,022,729)	(\$28,885,243)
17	Retail Costs	\$27,310,692	\$25,836,753	\$28,047,682	\$81,195,126
18	Total Forecasted Generation Level Retail Sales	1,121,475,694	1,056,318,878	t,142,806,896	3,320,601,468
19	Retail FUEL Rate \$/kWh				\$0.0244519
	Reconciliation Adjustment			· · · ·	·····
20	Under (Over) Recovery				\$2,778,180
21	Forecasted RA Rate \$/kWh			:	\$0.0013220
	Line Loss Adjustment	Distribution	Loss Factor ²	Rate at Distribu	tion Level
22	High Voltage & Substation	1.00	583	\$0.02592	42
23	Primary	1.01	732	\$0.02622	03
24	Secondary & Residential	1.04	687	\$0.02698	19
		••		Summer 2010 F	UEL Rider
	Standard Offer Metered Level Sales and Revenue Forecast			kWh	Revenue \$
26	High Valtage & Cubatelian			22 790 629	£975 776

25 High Voltage & Substation

26 Primary

27 Secondary & Residential28 Total

 Summer 2010 FUEL Rider

 <u>kWh</u>
 <u>Revenue \$</u>

 33,780,628
 \$875,736

 253,531,848
 \$6,647,681

 1.728,613,419
 \$46,641,274

 2,015,925,895
 \$54,164,691

Workpaper 1: Column A of this workpaper (lines 1-14) reflects a breakout of the categories of the forecasted costs that the Company has included in its Fuel Rider for the period September through November 2010. Columns B, C and D provide a breakout of the forecasted amounts associated with each expense category for September, October and November 2010, respectively, and which totals the \$110.080 million shown on Schedule 1. Lines 16 through 19 of Workpaper 1 reflect the forecasted amounts shown on Schedule 1 for DP&L's off-system sales, retail costs, forecasted generation sales and retail fuel rate. Lines 20 and 21 of Workpaper 1 reflect the under-recovery of \$2.778 million and the forecasted RA rate of \$0.0013220 per kWh. Lines 22 through 24 of Workpaper 1 reflect the distribution line loss factors and forecasted fuel rates at the distribution level, which are shown on Schedule 1 at lines 8 and 9, respectively and were calculated by multiplying DP&L's forecasted retail fuel rate by each of the distribution line loss factors. Lines 25 through 28 of Workpaper 1 reflect a breakout of DP&L's standard offer metered level sales and revenue forecast. Specifically, Column D reflects forecasted kWh for the High Voltage & Substation, Primary and Secondary &

Residential voltage levels of 33.781 million kWh, 253.532 million kWh and 1.729 billion kWh, respectively. The Company's forecast totals 2.016 billion kWh as shown on line 28. Column E of Workpaper 1 reflects the Company's forecasted Fuel Rider revenue for each voltage level, which was calculated by multiplying the kWh associated with each of the voltage levels referenced above by the forecasted fuel rates at the distribution level. The Company's forecasted Fuel Rider totals \$54,165 million as shown on line 28.

Quarterly FUEL Rider Filing – December 2010 through February 2011

Exhibit 6-12

Forecasted Quarterly Rate Summary	, December 2010 through February 2011
-----------------------------------	---------------------------------------

	THE DAYTO	N POWER AND	LIGHT COMPA	NY		
	С	ase No. 09-1012-	EL-FAC			
		FUEL Ride	a			
	Foreca	asted Quarterly R	ate Summary		1	
Line	(A) Decementary	(B)	(C)	(D) Feb 11	(E) Total	(F) Source
1	Forecasted FUEL Costs	\$39,026,238	\$41,596,393	\$40,065,957	\$120,688,589	<u>DAULCE</u>
2	Assigned to Off-System Sales	<u>(\$8,283,020)</u>	<u>(\$4,941,448)</u>	(\$5,423,520)	<u>(\$18,647,989)</u>	
3	Retail Costs	\$30,743,218	\$36,654,945	\$34,642,437	\$102,040,600	Line 1 + Line 2
4	Forecasted Generation Level Retail Sales	1,270,485,200	1,375,935,801	1,225,567,764	3,871,988,765	Workpaper 1, Line 18
5	Retail FUEL Rate before Reconciliation Adjustment \$/kWh				\$0.0263535	Line 3 / Line 4
6	Reconciliation Adjustment S/kWh				\$0.0043764	Schedule 2, Line 6
7	Forecasted Retail FUEL Rate S/kWh		.		\$0.0307299	Line 5 + Line 6
	FUEL Rates at Distribution Level:		High Voltage & Substation	Primary	Secondary & Residential	
ð	Distribution Line Loss Factors		1.00583	1.01/32	1.04087	Time 7 * Time 9
7	FUEL Raies Jikwa		20.0202021	30.0312021	30.0321/02	LUK L LUK 0

Schedule 1: This schedule reflects DP&L's estimates of the monthly fuel costs it expected to incur during the period December 2010 through February 2011⁴. As shown on lines 1-3 of Schedule 1, the categories included DP&L's forecasted fuel costs for December 2010 as well as January and February 2011, which totaled \$120,689 million (column E), less amounts assigned to Off-System Sales which totaled \$18.648 million, which resulted in forecasted net Retail Costs of \$102.041 million. As shown on line 4 of Schedule 1, the Company included its forecasted Generation Level Retail Sales which totaled 3.872 billion kWh for the period December 2010, as well as January through February 2011. The Company then calculated its retail fuel rate before Reconciliation Adjustment of \$0.0263535 per kWh by dividing the net Retail Costs of \$102.041 million by the forecasted Generation Level Retail Sales as shown on line 5. The Company reflected a Reconciliation Adjustment for the period June through August 2010 (see Schedule 2 discussion below) of \$0.0043764 per kWh on line 6. DP&L added its Reconciliation Adjustment to the \$0.0263535 per kWh noted above to derive its forecasted retail fuel rate of \$0.0307299 per kWh as shown on line 7 of Schedule 1. After applying the line loss factors of 1.00583, 1.01732 and 1.04687 cents per kWh for the High Voltage & Substation. Primary and Secondary & Residential voltage levels, the

⁴ January and February 2011 are not within the 2010 audit period.

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Company calculated fuel rates at the distribution level of \$0.0309091, \$0.0312621 and \$0.0321702 cents per kWh as shown on line 9.

Exhibit 6-13 **Reconciliation Adjustment – June through August 2010** THE DAYTON POWER AND LIGHT COMPANY Case No. 09-1012-EL-FAC FUEL Rider Reconciliation Adjustment (RA) Line (F) (A) (B) (C) (D) (E) <u>No.</u> Description <u>Jun-10</u> <u>Jul-10</u> <u>Aug-10</u> Total Source 1 Actual Fuel Cost \$24,555,931 \$30,865,717 \$26.624.255 \$82,045,902 Accounting Record 2 Actual Revenue Recovery (\$22,333,621) (\$25,194,126) (\$25,874,262) (\$73,402,009) Accounting Records 3 Prior Reconciliation Under Recovery \$2,576,828 Reconciliation Adjustment for Jan-Feb, 2010 \$11,220,722 Line 1 + Line 2 + Line 3 Under (Over) Recovery Dec-10 <u>Jan-11</u> Feb-11 5 Forecasted Sales 827,409,024 933,378,913 803,137,299 2,563,925,236 6 Forecasted RA Rate \$/kWh \$0.0043764 Line 4 / Line 5

Schedule 2: Line 1 of Schedule 2 reflects DP&L's actual fuel costs that were incurred during June through August 2010, which totaled \$82.046 million (column E). Line 2 of Schedule 2 reflects DP&L's actual revenues for the same period, which totaled \$73.402 million. Line 3 of Schedule 2 is a line item referred to as a "Prior Reconciliation Under Recovery", which is in the amount of \$2.577 million. During Larkin's onsite field visit, the Company explained that this amount represented the under collection of the reconciliation that was built into the fuel rate for the period June through August 2010. Due to continuing under-collections, the Company determined that none of the \$2.577 million RA Adjustment for January or February 2010 (see, e.g., Exhibit 6-7, line 3) had yet been collected. Line 4 of Schedule 2 reflects the difference between the Company's actual fuel costs and actual revenues for the period June through August 2010 as well as the prior reconciliation under-recovery of \$2.577 million referenced above and results in an overall under-recovery for this period in the amount of \$11.221 million. Line 5 of Schedule 2 reflects DP&L's forecasted sales for the period December 2010 through February 2011, which totaled 2.564 billion (column E). The Company derived its Reconciliation Adjustment of \$0.0043764 per kWh (shown on Schedule 1, line 6) by dividing the under-recovery of \$11.221 million by its forecasted sales for the period December 2010 through February 2011.

Exhibit 6-14 Forecasted Quarterly Rate – Workpaper 1, December 2010 through February 2011

THE DAYTON POWER AND LIGHT COMPANY Case No. 09-1012-EL-FAC FUEL Rider

Line	(A)	(B)	(C)	(D)	(E)
<u>No.</u>	Description	Dec-10	<u>Jan-11</u>	Feb-11	Total
	Forecasted Costs (\$) ¹			:	
1	Steam Plant Generation (501)	\$29,850,322	\$30,783,643	\$29,631,380	\$90,265,345
2	Steam Plant Fuel Oil Consumed (501)	\$503,803	\$725,736	\$881,589	\$2,111,128
3	Steam Plant Fuel Handling (501)	\$579,636	\$615,673	\$592,628	\$1,787,937
4	Steam Plant Gas Consumed (501)	\$3,310	\$4,270	\$0	\$7,580
5	Maintenance on Coal Handling Equipment (512)	\$264,474	\$261,261	\$332,706	\$858,441
6	Depreciation Expense on Coal Handling Equipment (403)	\$165,831	\$200,000	\$200,000	\$565,831
7	Coal Sales (456)	(\$598,720)	(\$362,916)	(\$362,916)	(\$1,324,551)
8	System Optimization	\$1,184,677	\$338,086	\$33\$,086	\$1,860,850
9	Heating Oil Realized Gains or Losses (456)	\$42,500	(\$69,707)	\$0	(\$27,207)
10	Allowances Consumed (509)	\$0	\$0	\$0	\$0
11	Cost of Fuel, Gas and Diesel Peakers (547)	\$111,256	\$152,365	\$6\$,698	\$329,319
12	Purchased Power (555)	\$6,919,149	\$8,947,982	\$8,386,786	\$24,253,917
13	Purchased Power Realized Gain/Losses (421 & 426)	\$0	\$0	\$0	\$0
14	Allowance Sales (411.8 & 411.9)	\$0	\$0	× \$0	\$0
15	Total Costs	\$39,026,238	\$41,596,393	\$40,065,957	\$120,688,589
16	Assigned to Off System Sales ¹	(49 797 070)	(\$4 041 449)	(85 400 500)	(\$19 647 096)
10	Assigned to On-System Sales	(\$0,203,020)	(34,941,440)	(33,423,320)	(#10,047,909)
17	Retail Costs	\$30,743,218	\$36,654,945	\$34,642,437	\$102,040,600
18	Total Forecasted Generation Level Retail Sales ¹	1,270,485,200	1,375,935,801	1,225,567,764	3,871,988,765
19	Retail FUEL Rate \$/kWh				\$0.0263535
	Reconciliation Adjustment				
20	Under (Over) Recovery			•	\$11,220,722
21	Forecasted RA Rate \$/kWh				\$0.0043764
	Line Loss Adjustment	Distribution	Loss Factor ²	Rate at Digtr	ibution Level
22	High Voltage & Substation	1 00	583	50 03	19091
23	Primary	1.00	732	\$0.031	2621
24	Secondary & Residential	1.04	687	\$0.032	21702
				Winter 2010	FUEL Rider
	Standard Offer Metered Level Sales and Revenue Forecast			kWh	Revenue \$
25	High Voltage & Substation			20,663,622	\$638,694
26	Primary			176,626,975	\$5,521,730
27	Secondary & Residential			<u>2,257,639,431</u>	<u>\$72.628.712</u>
28	Total			2.454.930.028	\$78,789,136

Workpaper 1: Column A of this workpaper (lines 1-14) reflects a breakout of the categories of the forecasted costs that the Company has included in its Fuel Rider for the period December 2010 through February 2011. Columns B, C and D provide a breakout of the forecasted amounts associated with each expense category for December 2010 as well as January and February 2011, respectively, and which totals the \$120.681 million shown on Schedule 1. Lines 16 through 19 of Workpaper 1 reflect the forecasted amounts shown on Schedule 1 for DP&L's off-system sales, retail costs, forecasted generation sales and retail fuel rate. Lines 20 and 21 of Workpaper 1 reflect the underrecovery of \$11.221 million and the forecasted RA rate of \$0.0043764 per kWh. Lines 22 through 24 of Workpaper 1 reflect the distribution line loss factors and forecasted fuel rates at the distribution level, which are shown on Schedule 1 at lines 8 and 9,

respectively and were calculated by multiplying DP&L's forecasted retail fuel rate by each of the distribution line loss factors. Lines 25 through 28 of Workpaper 1 reflect a breakout of DP&L's standard offer metered level sales and revenue forecast. Specifically, Column D reflects forecasted kWh for the High Voltage & Substation, Primary and Secondary & Residential voltage levels of 20.664 million kWh, 176.627 million kWh and 2.258 billion kWh, respectively. The Company's forecast totals 2.455 billion kWh as shown on line 28. Column E of Workpaper 1 reflects the Company's forecasted Fuel Rider revenue for each voltage level, which was calculated by multiplying the kWh associated with each of the voltage levels referenced above by the forecasted fuel rates at the distribution level. The Company's forecasted Fuel Rider totals \$78.789 million as shown on line 28.

Quarterly FUEL Rider Filing – Showing Reconciliation Adjustment for September through November 2010

Exh Rec	ibit 6-15 conciliation Adjustment	iation Adjustment September through November 2010 THE DAYTON POWER AND LIGHT COMPANY Case No. 09-1012-EL-FAC FUEL Rider Reconciliation Adjustment (RA) (A) (B) (C) (D) (E) (F)						
		THE DAYT Re	ON POWER ANI Case No. 09-1012 FUEL Rid conciliation Adjust	D LIGHT COMPA -EL-FAC er stment (RA)	ANY			
Line <u>No.</u> 1	(A) <u>Description</u> Actual Fuel Cost	(B) <u>Sep-10</u> \$18,999,542	(C) <u>Oct-10</u> \$14,853,743	(D) <u>Nov-10</u> \$17,595,994	(E) <u>Total</u> \$51,449,279	(F) <u>Source</u> Accounting Records		
2	Actual Revenue Recovery	(\$21,065,964)	(\$15,553,787)	(\$15,357,354)	(\$51,977,105)	Accounting Records		
3	Prior Reconciliation Under Recovery				\$2,778,180	2010 Fall Quarter Reconciliation		
4	Under (Over) Recovery				\$2,250,354	Line 1 + Line 2 + Line 3		
5	Forecasted Sales	<u>Mar-11</u> 690,251,743	<u>Apr-11</u> 498,353,131	<u>May-11</u> 575,766,741	1,764,371,615	: :		
6	Forecasted RA Rate \$/kWh				\$0.0012754	Line 4 / Line 5		

Schedule 2: Consists of consumables and allowances, and gains and losses on sales of allowances.

December 2010 Information Not Yet Included in a Quarterly FUEL Rider Filing

Exhibit 6-16 Estimate of Reconciliation Adjustment for December 2010

THE DAYTON POWER AND LIGHT COMPANY Case No. 09-1012-EL-FAC FUEL Rider Reconciliation Adjustment (A) (B) (C) Description Der-10 Source

<u>No.</u> 1	Description Actual Fuel Cost	<u>Dec-10</u> \$ 24,444,042	Source Fuel Rider Reconcilation Summary from Annual Filing
2	Actual Revenue Recovery	\$ (23,057,399)	Fuel Rider Reconcilation Summary from Annual Filing
3	Under (Over) Recovery	\$ 1,386,643	Line 1 + Line 2

FUEL Rider Deferrals

Line

In its Opinion and Order dated June 24, 2009 regarding DP&L's October 10, 2008 application for a Electric Security Plan ("ESP"), in Case No. 08-1094-EL-\$SO, the Commission approved an ESP and FUEL Rider for DP&L for a three-year period January 1, 2010 through December 31, 2012.

DP&L records its fuel deferrals in Account 1823000/2543000.

For 2010, DP&L reports the following monthly over- and under-collections:

Exhibit 6-17 Monthly Over- And Under-Collections For 2010

	FUEI	FUEL Rider (Over) or		
Month	Uı	nder Recovery		
January	\$	1,493,867		
February	\$	1,082,961		
March	\$	(17,774)		
April	\$	89,303		
May	\$	2,706,652		
June	\$	2,222,310		
July	\$	5,671,591		
August	\$	749,993		
September	\$	(2,066,421)		
October	\$	(700,045)		
November	\$	2,238,640		
December	\$	1,386,643		
Total 2010	\$	14,857,720		

Notes and Source:

DP&L Case No. 09-1012-EL-FAC, Annual FUEL Rider Filing, FUEL Rider Reconciliation Summary These are "as-filed" and unadjusted for DP&L's 2010 reconciliations.

The Company's response to data request LA-2010-48, et al produced DP&L's Excel files and supporting workpapers for the FUEL Rider filings and RA adjustments.

Other Fuel Handling Expense

Data Request Onsite 44(c) asked DP&L to provide any calculations the Company presented in Case Nos. 08-1094-EL-SSO et al showing how the FUEL rider rate was to be calculated and/or which accounts and costs were to be included. The material provided by DP&L in response to Onsite 44 indicated that the company's original ESP application in Case No. 08-1094-EL-SSO included a section requesting a fuel deferral. The Company responded that the specific costs, allocations, and methodology were articulated in the application and testimony, which is set forth in publically available documents on the PUCO website. We made a search of documents filed in Case No. 08-1094-EI-SSO and concluded that FERC Accounts 403 and 512 were not among the accounts to be included in DP&L's proposed fuel deferral mechanism. We note that DP&L witness Greg Campbell's testimony in Case No. 08-1094-El-SSO at pages 3-5 mentions FERC Accounts 501 (other than labor associated with fuel purchasing and the removal and disposal of fly ash), 502 (other than water analysis and operation of the NPDES equipment), 509, 547, 555, 411.8 and 411.9 as being the includable accounts and states that DP&L would only defer the excess of the retail jurisdictional share of those accounts. DP&L's response to Onsite 44(c) indicates that in the Case No. 08-1094-El-SSO settlement discussions, the Company did not provide any detailed calculations that showed the accounts or costs that would be included.

To make sure we had not overlooked some information of which the Company is aware but has not yet specifically disclosed, we referenced the above and asked the Company in data request onsite 52 to:
a. Please confirm that no testimony, briefs or other documents filed or disclosures made by Dayton Power & Light in Case No. 08-1094-El-SSO et al mentioning FERC Accounts 403 and 512 as being among the accounts included in the fuel cost deferral mechanism.

b. If the Company believes these two accounts (Accounts 403 and 512) were addressed as being includable in the fuel cost deferral mechanism somewhere in Case No. 08-1094-El-SSO et al, please provide specific citations to the specific documents, pages, line numbers, etc.

The Company's response to Onsite 52 stated as follows:

The Company believes that the Stipulation and related Order required DP&L to develop and file a fuel recovery rider without specifying or limiting the Company's rights to propose which categories of costs were to be included or the mechanics of the rider, except to the extent limited and specified in section 2 of the Stipulation. The original application in Case No. 08-1094-EL-SSO, and testimony submitted in support of the original application, were made in conjunction with a proposal based on a 'slice of system' allocation, costs that equated to 1.8 cents/kWh, and a deferral of any costs above that. Through the stipulation, DP&L agreed to forego recovery of 2009 fuel costs, and was permitted to contemporaneously recover fuel costs beginning in 2010 that exceeded 1.97 cents, and was based on a 'least cost' allocation. The application and settlement are therefore significantly different. The original application and testimony supporting the deferral request was not intended to support the stipulation.

Consistent with the stipulation, the first fuel filing in October 2009 states the accounts, methodology, and process that are in-line with the fuel provisions of the Stipulation approved by the Commission in June 2009.

The Company thus believes that the Stipulation and related Order allowed DP&L to develop and file a fuel recovery rider to include additional accounts, such as FERC Accounts 403 and 512, which were not addressed anywhere in its application, testimony, briefs or other filings the Case No. 08-1094-EL-SSO.

The inclusion of cost recorded in FERC accounts 403, Depreciation, and 512, Maintenance, in a fuel cost adjustor is unusual. Other Ohio utilities, such as Columbus Southern Ohio ("CSP"), Ohio Power Company ("OP"), (collectively "AEP-Ohio"), and Duke Energy Ohio ("Duke"), do not include those accounts in their fuel case recovery mechanisms. Nor was Accounts 403 or 512 included in the former Ohio Electric Fuel Component ("EFC"). Guidance from PUCO Staff we received as to whether costs in these accounts should be included in DP&L's FUEL Rider suggests that perhaps they should <u>not</u> be included.

The Company's rationale for including the Other Fuel Handling costs, as noted above, is that⁵:

This fuel handling activity allows the Company to manage the complexity of unloading, storing and blending the multiple fuel types that DP&L can now use.

⁵ See, e.g., DP&L's Application to Establish a FUEL Rider, at page 4.

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These costs are incurred to allow the Company to burn a wider range of fuels and to reduce the overall fuel cost to customers.

Subsequently, the Company provided the following statement:

Senate Bill No. 221 permits the automatic recovery of prudently incurred costs, including "...the cost of fuel used to generate the electricity supplied under the offer...". This has been incorporated in Section 4928.143 of the Revised Code, which also includes other fuel related costs such as the cost of emission allowances and the cost of any future federally mandated carbon or energy taxes.

The cost of coal used to generate the electricity supplied to DP&L's customers includes the purchase of the coal from the mine, its physical transportation to the power plant, unloading at the power plant and handling at the plant site until it enters the first boiler plant bunker, hopper, bucket, tank or holder of the boilerhouse structure. The handling at the plant site is an integral part of the total cost of preparing the coal to be burned. It is impossible to burn the coal at the power plant to generate electricity for customers without incurring the handling cost to get it to the plant's boiler-house.

At DP&L's Stuart and Killen Power Plants, the Company has added flue gas desulfurization equipment (scrubbers). In running the scrubbers, DP&L is mixing higher sulfur coal with lower sulfur coal to develop the blend of coal that best meets the scrubber requirements with the least cost to customers. As a result, DP&L has

Coal handling at the plant site has three components per the Federal Energy Regulatory Commission's (FERC's) Uniform System of Accounts. These three components are operation of the equipment, which is recorded in FERC Account 510, Fuel; maintenance of the equipment, which is recorded in FERC Account 512, Maintenance of Boiler Plant; and FERC Account 403, Depreciation Expense. Please note that the FERC Uniform System of Accounts has been adopted by the Public Utility Commission of Ohio (PUCO) for utility reporting in Ohio.

DP&L believes that it should be permitted to recover its total fuel cost needed to generate electricity for customers. This would include the complete cost of handling at the power plants to get the coal from where it is unloaded to where it is physically burned. The cost of the person operating the coal conveyor, the periodic maintenance of the coal conveyor and the depreciation of the coal conveyor, although recorded in different FERC accounts, are all integral parts of the process of generating the electricity delivered to customers.

Larkin reviewed the supporting documentation provided by DP&L, including the support relied upon by DP&L for the Depreciation Expense on fuel handling equipment in Account 403 provided in response to data request Onsite 5. As illustrative examples, the coal handing equipment identified for depreciation expense includes coal conveyers, coal crushers, coal dust eliminating equipment, coal hoppers, cranes, hoists and derricks, a magnetic separator and buildings, marine equipment, coal and lime barge unloading equipment, coal bunkers, silos and surge bins, coal chutes and gates, coal conveyers, station piping, conduit, pans and hangers, main power cable and bus, motor control center, switchboard, transformer, power station or substation, and supporting structures and substation equipment. It appears that the vast majority, if not all, of such fuel handling equipment would be needed at the plant, regardless of whether different types of coal were being blended.

Some of the fuel handling equipment data for which DP&L has included depreciation expense from co-owner operated plants, such as Conesville Unit 4 and Zimmer may be outdated. The listing of coal handling equipment for Conesville Unit 4 contains a note that states, among other things, that

handing equipment show

The listings of Zimmer plant coal

DP&L is using the data from the earlier years to arrive at an estimated percentage of coal handing equipment compared to the total FERC 300 level plant investment. DP&L multiplies these estimated percentages times the January 31, 2010 plant balances by FERC 300 level account to arrive at an estimate of the amount of the 300 level plant associated with coal handling. In addition, DP&L was conservative and did not claim depreciation on coal handling on the Beckjord, East Bend and Miami Fort Plants due to the lack of historical records.

DP&L has not identified specific or incremental coal handling equipment cost that is used to blend multiple fuel types. Finally, we do not believe that DP&L has established that "these costs are incurred to allow the Company to burn a wider range of fuels and to reduce the overall fuel cost to customers." In summary, based on our review, DP&L's rationale for including the coal handling costs does not appear to withstand scrutiny.

It does not appear that the parties to the settlement in Case No. 08-1094-EL-SSO et al intended that the costs in Accounts 403 and 512 should be recoverable in DP&L's FUEL Rider. Because such inclusion or not may be the results of different interpretations of the stipulation, we have identified this issue and show in our report the costs for other fuel handling accounts by month of 2010 that DP&L has recorded and included in the FUEL Rider Reconciliation Adjustment calculations.

We have accumulated and verified the amounts that DP&L included in the Fuel Rider for 2010 for Accounts 403 and 512, which are summarized in the following Exhibit (in total and the portion allocated to DP&L's Retail Fuel Rider) discussed in a subsequent section of the report.

The costs for FERC Accounts 403 and 512, which DP&L included in the Reconciliation Adjustment portion of its quarterly filings are summarized in the table below⁶.

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⁶ The totals in the table reflect adjustments made by DP&L to correct errors that it discovered in the calculations of its RA workpapers (see additional discussion in a later section of this report).

Exhibit 6-18 Other Coal Handling Costs For 2010

Description		January	February	March	April	May	June	July	August	September	October	November	December	Y1
Description		2010	2010			2010	2010	2010		2010	4010	2010	7010	1000
Account 403 - Depreciation Expense on Coal Hundling Equipme	east													
Huchings		\$ 638	S 219	5 1,023	\$ 3,879	\$ (240)	\$ 832	\$ 2,681	\$ 2,548	\$ 3,367	\$ 3,879	3 2,687	\$ 4,384	5 24,097
Sman		\$ 60,293	\$ 58,598	\$ 43,980	\$ 48,080	\$ 35,644	\$ 51,483	\$ 60,538	\$ 53,233	\$ 33,595	5 39,218	\$ 39,047	5 40,019	\$ 203,528
Killen		\$ 55,780	\$ \$7,098	\$ 56,972	\$ 57,005	\$ 57,030	\$ 57,098	\$ 57,052	3 >0,812	\$ 57,020	3 20.041	3 20,990	3 30,495	2 082,017
Heckjord		s -	5 .	s -	s -	S -	\$ -	5 -	s -	5 -	S ·	3		5 -
Conesville		\$ 12	\$ 35	\$ (8)	5 38	\$ 3	S 146	\$ 412	\$ 201	\$ 106	\$ 21	\$ 2,344	\$ 109	\$ 3,319
East Bend		s -	5.	5 -	\$ -	\$ -	\$ -	\$ -	\$ -	5 -	5 -	5 -	ş -	\$ -
Miami Fort		s -	s .	S -	\$ -	\$ -	S -	\$ -	s -	S -	s -	s -	\$ -	s -
Zimmer		\$ 122,332	\$ 122,339	\$ 122,339	\$ 122,315	5 122.148	\$ 122,179	\$122,339	\$ 122,325	\$ 122,277	\$ 122,339	\$ 122,339	\$ [22,334	\$ 1,467,605
Adjusting Entries per DP&L workpapers*		<u>\$ 876</u>	5 367	\$ 706	\$ 1,529	\$ (24)	\$ 511	<u>\$ 482</u>	\$ 179					<u>\$ 4,626</u>
	Subtestal	\$ 239,931	\$ 238,656	\$ 225,012	\$ 232,846	\$ 214 581	\$ 232,249	\$ 243,504	\$ 235,300	\$ 218,163	\$ 222,098	\$ 223,313	\$ 221,539	\$ 2,747,192
Less: Amount allocated to DPLER per DP&L Workpaper .6		\$ (29,147)	\$ (42,412)	\$ (44,220)	<u>\$ (63,933)</u>	\$ (68,293)	<u>\$ (70,638)</u>	<u>\$ (72,787)</u>	\$ (74,260)	\$ (84,014)	\$ 06,150	5 (97,719)	\$ (82,389)	\$ (825,968)
DP&L Retail Coal Handling Expenses in Fuel Rider		\$ 210,784	\$ 196,244	\$ 180,792	\$ 168,913	\$ 146,288	\$ 161,611	\$170,717	\$161,040	\$ 134,149	\$ 135,942	<u>\$ 125,594</u>	\$ 139,150	\$ 1,921,224
		January 2010	Februery 2010	March 2010	April 2010	May 2010	June 2010	July 2010	Angust 2010	September 2010	October 2010	November 2010	Decamber 2010	Total
Account \$12 - Maintenance on Coal Handling Equipment														
Hutchings		S (199)	\$ 563	\$ 3,758	\$ 1.650	\$ (346)	\$ 541	\$ 2,442	\$ 905	\$ 8,823	5 788	\$ 3,011	\$ 4,890	\$ 26,826
Stuart		5 364,889	\$ 94.916	5 95.049	\$ 116.622	\$ 82,813	\$ 87,535	\$168,547	\$ 103,642	\$ 52,912	\$ 69,005	\$ 89,852	\$ 89,428	\$1,415,210
Killen		\$ 131,402	\$ 39,123	5 47,499	\$ 42,634	\$ 14,273	\$ 48,380	\$ 20,424	\$ 35,725	\$ 46,642	5 149 514	\$ 20,956	\$ (2,529)	\$ \$88,043
Backjord		\$ -	s .	5 -	s .	5 -	5 -	s - 2	s -	\$.	\$ -	5 -	\$ -	s -
Conesville		š -	\$.	5 -	\$ -	\$ -	s .	s - 2	5 -	\$.	5 -	s -	s -	s -
East Bend		\$ -	ŝ.,	š .	\$.	\$.	\$.	5 -	S -	\$ -	S +	5 -	s -	s -
Miami Fort		s .	\$.	5 -	\$ -	\$ -	\$.	\$.	s -	\$ -	5 -	\$ -	s -	5.
Zimmer		s .	š .	5 -	\$.	5 -	\$ -	s -	s -	\$ -	5 -	\$ -	\$ -	\$
Adjusting Entries per DP&L workpapers*		\$ (642)	5 286	\$ 403	\$ 689	\$ (17)	S 333	\$ 272	\$ 343		i i			\$ 1,667
	Subtotal	\$ 495,450	\$ 134,688	\$ 146,709	\$ 161,395	\$ 96,723	\$ 136,789	\$ 191,685	\$ 140,615	\$ 102,377	\$ 219,307	\$ 113,819	\$ 91,789	\$ 2,031,746
Less: Amount allocated to DPLER per DP&L Worksamer .6		\$ (60.487)	\$ (23,957)	5 (28,843)	\$ (44,472)	\$ (30,785)	\$ (41,594)	\$ (57,330)	\$ (44,303)	\$ (39,425)	3 (94,947)	\$ (49,385)	\$ (34,136)	\$ (559,084)
DP&L Retail Coal Handling Expenses in Facl Rider		\$ 434,963	\$110,931	\$ 117,866	\$117,123	\$ 65,938	\$ 95,195	\$ 134,355	\$ 96,312	\$ 62,952	\$ 124,340	\$ 64,614	\$ 57,633	\$ 1,481,662
Notes and Source														

Function above: Amounts above from DP&L's Recardilation Adjustment workpropers that were provided in LA. 2010-45&46, LA.2010-58&59 as well as Onsite No. 10 (December 2010) * These amounts reflect the aggregate monthly adjusting entries that are reflected in the following Company Reconstillation Adjustment workpropers: LA.2010-45&46,11.3, LA-2010-45&46,11.22 and LA-2010-45&46,12.3

Improvement to Sales Forecasts

Based on Larkin's review of DP&L's Fuel Rider sales forecasts and the RA adjustments, it has become apparent that one significant factor contributing to the fuel cost undercollections experienced by DP&L in 2010 is DP&L's over-projections of FUEL Rider revenue. DP&L's forecast and actual FUEL Rider revenues for January through November 2010 are summarized in the following table:

Exhibit 6-19 Summary of DP&L's Forecast And Actual FUEL Rider Revenues

					Actual	Actual	Γ	
			Forecast		FUEL Rider	FUEL Rider		Difference
			FUEL Rider	ļ	Monthly	Revenue by	(A	ctual Below
	FUEL Rider		Revenue		Revenue	Ouarter	Ì	Forecast)
Month	Filing		(A)		(B)	(C)		(D) = C - A
January	1st Quarter			\$	29,818,488			
February	2010	\$	58,017,517	\$	25,533,366	\$ 55,351,854	\$	(2,665,663)
March				\$	24,198,968	i		
April	2nd Quarter			\$	19,523,305			
Мау	2010	\$	69,669,838	\$	17,010,005	\$ 60,732,278	\$	(8,937,560)
June				\$	22,333,621			ويتعارضها والمتراط المتراط
July	3rd Quarter			\$	25,194,126		ŀ	
August	2010	\$	81,890,977	\$	25,874,262	\$ 73,402,009	\$	(8,488,968)
September			-	\$	21,065,964			
October	4th Ouarter			\$	15,553,787			
November	2010	. \$	54,164,691	\$	15,357,354	\$ 51,977,105	\$	(2,187,586)
December	To Be Filed			\$	23,057,399		\$	-
Cumulative Total through November		\$	263,743,023	\$	241,463,246	\$ 241,463,246	\$	(22,279,777)
Total through December			••••••••••••••••••••••••••••••••••••••	\$	264,520,645			
Notes and Source:								

Col A: DP&L's Quarterly FUEL Rider Filings, Workpaper 1

Col B: DP&L Case No. 09-1012-EL-FAC, Annual FUEL Rider Filing, FUEL Rider Reconciliation Summary

During 2010, DP&L experienced significant customer switching to alternative providers⁷, including DP&L's affiliate, DPLER.

Because the Fuel Rider rate is bypassable, once customers switch to an alternative provider, they are no longer subject to paying rates established pursuant to the Fuel Rider. Consequently, customers who were DP&L retail jurisdictional customers during a period where an undercollection of fuel costs occurred, but who have selected an alternative provider, avoid the obligation to make future payments for the Fuel Rider deferral (undercollection) that had occurred in periods when the customers had been DP&L retail jurisdictional customers subject to the Fuel Rider. Paying for the Fuel Rider undercollection thus becomes the responsibility of only the remaining DP&L retail jurisdictional customers who have not switched providers.

DP&L's forecast of Fuel Rider sales for 2010 have generally reflected the impacts of known customer switching that had actually occurred, but has not reflected estimated impacts of customer switching anticipated to occur during the forecast period. For DP&L there appears to be a trend in customers switching to alternative providers that may continue.

⁷ Customers can opt to obtain generation service from a Certified Retail Electric Service (CRES) provider. CRES providers operating in DP&L's service territory include DP&L's affiliate DPLER and other nonaffiliated providers.

Report of the Management/Performance and Financial Audit of the Fuel Purchased Power Rider of The Dayton Power and Light Company (09-1012-EL-EFC)

The accuracy of DP&L's Fuel Rider kWh sales forecasts can presumably be improved by having DP&L incorporate its best estimates of anticipated customer switching into the Fuel Rider kWh sales forecasts. By incorporating forecasted estimates of customer switching into its Fuel Rider kWh sales estimates, the forecast kWh sales would be lower, and the Fuel Rider rate higher, other things being equal. The higher Fuel Rider rate reflective of the trend of customer switching at DP&L would thus help mitigate the portion of the Fuel Rider deferral (undercollection) related to customers that switch suppliers. Reflecting a best estimate of customer switching into the Fuel Rider sales forecast should improve the accuracy of such forecasts. It should also facilitate assigning the Fuel Costs currently to the customers taking retail jurisdictional service from DP&L (i.e., improve the assignment of costs to the cost-causative customers), so that the amount of fuel cost deferral burden caused by customers who have switched will be minimized for the customers that remain on DP&L's retail service.

Findings:

In preparing its Fuel Rider sales forecasts for its quarterly Fuel Rider filings affecting 2010, DP&L reflected the impact of known customer supplier switching, but did not forecast additional customer supplier switching likely or expected to occur for the forecast periods.

DP&L's Fuel Rider deferral (i.e., the 2010 undercollection) has been impacted by customer supplier switching that has occurred but which was not fully incorporated into DP&L's forecasts of Fuel Rider sales forecast.

Recommendation:

To improve the accuracy of its forecast Fuel Rider rates and to minimize undercollection build-up related to customers who leave DP&L's retail service for an alternative supplier, DP&L should incorporate its best estimates of the impacts of ongoing customer supplier switching into its Fuel Rider kWh sales forecasts.

Potential for a Terminal Undercollected Balance

Data request LA-2010-52 asked the Company to provide the most current estimates and projections of the deferred FUEL Rider costs currently through to the end of the ESP term. This request also asked the Company to indicate DP&L's estimate of the collection period necessary to completely recover the deferred FUEL Rider costs after the ESP terms ends and to provide an estimate of the prospective surcharge and rate impact. In response, DP&L stated that they do not estimate a prospective surcharge beyond the ESP period. The FUEL Rider design runs on a six-month reconciliation lag to allow for an over/under recovery to be resolved in a short amount of time. At the end of the current ESP period, which runs through December 31, 2012, only the last two quarters will be subject to over/under recoveries and would be resolved in DP&L's next SSO filing.

Minimum Review Requirements

As noted above, Larkin referred to the objectives and procedures outlined in Appendix E of former Chapter 4901:1-11 of the Ohio Administrative Code as guidance for the review requirements of this project. The purpose of the Uniform Financial Audit Program

Standards and Specifications for the Electric Fuel Component is to provide uniform standards and specifications as guidelines for an independent auditing firm which conducted an EFC "financial audit"⁸ pursuant to former section 4905.66(B)(2) of the Revised Code and former rule 4901:1-11-09 of the Administrative Code. The EFC "financial audit" program is only a guide for the auditor and should not be used to the exclusion of the auditor's initiative, imagination and thoroughness.

Section E of those Standards provides for the following Minimum Review Requirements:

The auditor's review shall include, but not be limited to, a review of:

Purchasing procedures for fuel procurement not under long-term contracts;

Procedures for accounting for fuel receipts, testing, and payments;

Procedures for weighing, testing and reporting coal burned;

Procedures for amortizing nuclear fuel costs corresponding to nuclear generated energy;

Procedures for recording purchases and interchanges;

Procedures for accounting treatment of emission allowances; and

Procedures for calculating the EFC rate, including an evaluation of the company's compliance with the financial procedural aspects of former Chapter 4901:1-11 of the Administrative Code, and its application to customer bills.

Larkin reviewed DP&L's response to data request LA-2010-1 for the Company's procedures for accounting for fuel receipts, testing of samples to ensure quality, and payments to vendors. These procedures are as follows:



⁸ As noted above, the review of DP&L's quarterly FUEL Rider filings were conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants.



Larkin also reviewed the Company's procedures for weighing, testing and reporting coal burned per data request LA-2010-2.

DP&L does not have nuclear generation, so the provisions of E (4) do not apply.

As described in LA-2010-3, DP&L's procedures for recording purchases and interchanges of energy involve



DP&L owns 4.9% of and entered into an agreement with Ohio Valley Electric Corporation ("OVEC") effective March 13, 2006 to purchase 4.9% OVEC's available energy for sale. These purchases are treated as bilateral, with the only difference being that OVEC Demand and Energy charges are tracked in separate FERC sub-accounts. OVEC provides DP&L two provisional invoices each month, one for the 1st – 15th and one for the 16th – the last day of the month. These invoices are entered into Oracle AP and paid approximately five days after the invoice dates. DP&L also receives a settlement invoice every month, which could be either a payable or receivable. All OVEC invoices are recorded into Account 555.

Jointly Owned Generation

DP&L participates in seven jointly owned power plants, as described in the Company's response to LA-2010-4. The seven jointly owned power plants, and DP&L's ownership percentage as presented in DPL Inc's 2010 10-K, are comprised of the following:

<u>Plant</u>	<u>Co-owners</u>	<u>Operating</u> <u>Company</u>	DP&L Ownership Percentage
J.M. Stuart	Duke; Columbus Southern Power ("CSP")	DP&L	35%
Conesville #4	Duke; CSP	CSP	16.5%
Beckjord #6	Duke; CSP	Duke	50%
Zimmer	Duke; CSP	Duke	28.1%
Killen	Duke	DP&L	67%
East Bend	Duke	Duke	31%
Miami Fort #7 & 8	Duke	Duke	36%

Exhibit 6-20 DP&L's Ownership Percentage of Jointly Owned Power Plants

DP&L accounts for fuel at jointly owned generation plants as follows. The same accounting methodology is used at all seven jointly owned power plants:





Review Related to Coal Order Processing

An executed coal contract is used as authorization for DP&L to accept and pay for shipments that meet the contract requirements until the obligations have been fulfilled.

DP&L does not use purchase orders or purchase requisitions for coal. Contracts, as stated above, serve as authorization. DP&L's response to data request EVA-2010-1-1 and other follow up requests included copies of the coal contracts, which were reviewed by EVA.

To review the Company's processing of fuel invoices, Larkin obtained copies of cash vouchers and payment documentation for fuel purchases recorded in July 2010. These were provided in the response to data request LA-2010-9.

The information provided in LA-2010-9 included a page listing a summary of invoices, payment vouchers and invoices. For each invoice listed on the summary page, Larkin was able to trace the amount listed on the summary to the actual invoice. In addition, Larkin traced all of the invoices to general ledger account 151. No exceptions were noted.

Fuel Ledger

Data request LA-2010-10 requested DP&L's fuel ledgers for the period January through December 2010. In response, DP&L referred to the response to LA-2010-57, which requested that DP&L provide detailed general ledgers pages for each of the following accounts: 501, 512, 403, 456, 509, 547, 555, 421, 426, 411.8 and 411.9 (see additional discussion below).

BTU Adjustments

Data request LA-2010-11 asked DP&L to provide documentation for Btu adjustments for fuel purchases recorded in July 2010. In response, DP&L provided a spreadsheet created by using an SQL query, which included data of all receipts that were paid and booked in July 2010, along with qualities used for payment.⁹ DP&L provided these reports for the J.M. Stuart and Killen power plants. Since there were no narratives and/or other explanations provided with these reports, it was unclear to Larkin as to what conclusions should be drawn from the data in the context of what was requested in LA-2010-11. In response to our follow-up inquiry, DP&L stated:

The data submitted in response to data requests LA-2010-11, 15 and 25, provides coal quality analysis results for fuel purchases recorded in the month of July 2010. DP&L receives and records quality information from the lab for each shipment and uses this to perform any necessary BTU and/or other applicable

⁹ DP&L stated that the data provided in response to LA-2010-11 also applies to the responses to LA-2010-15 and LA-2010-25.

contract adjustments with our suppliers; contract quality adjustments are typically invoiced subsequent to the month of receipt. DP&L's quality control and field quality procedures ensure that samples are representative to the coal in each shipment. In the response data provided, the as-received Btu values for each shipment are included in column J. Other qualities are provided as labeled in the response.

Freight And Barge Vouchers

Data request LA-2010-12 asked DP&L to provide freight cash vouchers for two days of coal receipts in July 2010 as well as copies of the portions of the corresponding coal received reports. In response, DP&L stated that it did not receive any coal by rail in July 2010. Larkin requested that DP&L supplement its initial response with vouchers for a month in which DP&L did receive rail deliveries of coal. In its supplemental response to LA-2010-12, DP&L provided a copy of an invoice, which was issued to the Company by in April 2010. In addition, this supplemental response included a spreadsheet, which reflected as received coal data for train receipts booked in April 2010. Larkin traced this coal purchase to Account 151 in DP&L's general ledger

April 2010. Larkin traced this coal purchase to Account 151 in DP&L's general le for the period of April 2010. No exceptions were noted.

In data request LA-2010-13, Larkin requested that DP&L provide two cash vouchers from each barge company for coal unloaded at Company plants during July 2010 as well as copies of the portions of the corresponding coal unloading reports and purchase orders. DP&L's barging services are provided by **Service 100**. In response, DP&L provided copies of cash vouchers, which included data related to coal shipments received at the Killen and Stuart plants during July 2010 as well as a copy of the Barge Unloading Report, which details shipments of coal received in July 2010 for the Killen and Stuart plants. Upon reviewing and comparing the data listed on the barge unloading report and the cash vouchers, Larkin was able to trace the coal shipments detailed on the Barge Unloading Report to each of the cash vouchers provided. No exceptions were noted.

Fuel Analysis Reports

Data request LA-2010-14 asked DP&L to provide the Company's procedures for preparing monthly fuel analysis reports. In response, the Company stated:



DP&L has appropriate procedures in place for monitoring the quality of coal received.

Data request LA-2010-15 asked DP&L to provide copies of fuel analysis reports related to fuel purchases recorded during July 2010. In response, DP&L referred to the response to LA-2010-11, which is discussed in the BTU Adjustment section above. In that response, DP&L provided a spreadsheet created by using an SQL query, which included data of all receipts that were paid and booked in July 2010, along with qualities used for payment. DP&L provided these reports for the J.M. Stuart and Killen power plants. See the Btu Adjustments section of this report for the clarification provided by the Company as it relates to the fuel analysis reports for coal purchases recorded in July 2010 that were requested in LA-2010-15.

Retroactive Escalations

Data request LA-2010-16 asked that DP&L identify all pending or approved retroactive escalations that affect fuel cost for the period January through December 2010. In response, the Company, referring to the response to EVA-2010-1, stated that



noted that any GI/index adjustments that are related to coal deliveries made prior to January 1, 2010 are not recoverable by DP&L.

Review Related To Station Visitation And Coal Processing Procedure

Larkin conducted an onsite field visit to DP&L's Stuart plant site on February 23, 2011. Document requests LA-2010-17 through LA-2010-35 relate to fulfilling the objectives of the station visit and the review of the Company's coal processing procedure from the receipt of coal to the disposition of fly ash.

A description of the Company's coal receiving procedures and controls for shortages, overages, and other discrepancies was provided in DP&L's response to LA-2010-17, and is as follows:

- The Fuel Procurement group manages the coal deliveries by account management and scheduling.
- Supplier month-to-date deliveries are updated daily and used to monitor contract performance. In addition, the Company monitors year-to-date contract performance.
- Term contract obligations are considered fulfilled when a supplier has delivered an amount of coal that is less than a full barge over or under the specified tonnage, unless otherwise specified in the contract.

- Overages are prevented by only providing enough transportation equipment to deliver the amount specified in the contract.
- Shortages are made up in a subsequent month or longer period as necessary. In the event of a default, DP&L will exercise its rights under the subject agreement.





The Company resolves freight bill and car number discrepancies in the following manner:



The procedures for how damaged cars are checked and who instigates claims for shortages are as follows:

In a related question, LA-2010-34 requested a description of how freight bills, barge number and coal quantity and quality discrepancies are handled. Such discrepancies are handled in the following manner:



In response to data request LA-2010-35, DP&L described how damaged barges are checked and who instigates claims for shortages:





DP&L's response to LA-2010-21 described the Company's month-end cut-off procedures for coal deliveries and coal burn:



A description of the Company's coal sampling procedures was provided in response to data request LA-2010-22. The sampling procedures for the Stuart and Killen plants are as follows:

	· · · · · · · · · · · · · · · · · · ·	
•		

Coal sampling by ENSA t the Stuart plant was observed during the station visitation.

Scale calibration logs for the period January through July 2010 were requested in LA-2010-23. In response, DP&L provided conveyor calibration and feeder calibration records for the Stuart Plant for the entire year. In the event coal scales are inoperable, the following procedures are performed:

Copies of laboratory sampling reports for coal purchases recorded in July 2010 were requested in LA-2010-25 in order to compare such reports with accounting and purchasing records. In response, the Company referred to the response to LA-2010-11, which stated

DP&L's procedures for handling coal from the stockpile to the firebox or boiler were requested with data request LA-2010-26. In response, DP&L provided three separate sets of documentation titled "DPL Business Practice" for the Hutchings, Killen and Stuart stations. Each set of these documents outlined a number of coal handling procedures that are performed by personnel at each of the referenced stations. The procedures are specific and detailed for each plant, and include references and helpful diagrams, such as the following diagram (from the Stuart station coal handling procedures):

Exhibit 6-21

Diagram of Coal Barge Configuration and Coal Loading Specifications at the Stuart Station



An illustrative example of DP&L's detailed procedures for marking coal samples (from the Hutchings's coal handling procedures, at page 6) is shown below:

Exhibit 6-22 Description of Coal Sample ID Number components



DP&L's procedures for taking physical inventories of coal are described in the response to LA-2010-27. DP&L's procedures for coal pile inventory are detailed and specific.

DP&L's coal handling and coal pile physical inventory procedure manuals are among the most detailed we have seen.

The Company's response to LA-2010-28 provided working papers for the physical inventory taken at the Stuart, Hutchings, and Killen plants in July and August of 2010, which consisted of three Physical Inventory Reports (one for each plant) dated October 21, 2010.

In addition to the working coal inventory, DP&L maintains a permanent or "base" coal inventory, which is recorded in a plant account and amortized.

In response to data request LA-2010-29, which requested accounting documentation for physical inventory adjustments recorded for the review period, including the general ledger, and fuel stock and consumption records, DP&L provided:

- Physical inventory worksheets for coal and oil
- FMS summary reports and upload sheet
- Month-end Fuel Oil Activity Reports
- Journal voucher for Fuel Oil Inventory adjustments
- General Ledgers for Accounts 151 (Fuel Inventory) and 501 (Fuel Consumption)

Larkin tested DP&L's records on a judgmental sample basis, focusing on significant dollar amounts, and for coal was able to trace the amounts from the FMS Upload Sheet to

the general ledger (Account 501 - Fuel Inventory). With respect to fuel oil, Larkin was able to trace the amounts from the journal voucher to the general ledger (Account 501 – Fuel Consumption). The Company's response to LA-2010-30 describes the levels of review applicable to DP&L's plant operating statistics. The Power Plants develops Monthly Station Operating Reports, which are sent to various departments for cross-checking and reporting. The reports are also sent to the Middle Office, Fuels Department, and Accounting to verify the data used for accounting purposes.

Data request LA-2010-32 inquired about any Company internal investigations following through on generating station reports for the review period January through December 2010. DP&L's response indicated that there were no internal investigations during the review period.

Larkin requested copies of the station reports for the review period January through December 2010 that were sent to the Company's general office for incorporation into company statistics and workpapers sufficient to trace the reports to the statistics. DP&L's response to LA-2010-33 provided copies of Hutchings, Killen, and Stuart generating station reports for the period January through December 2010. Attachments to LA-2010-33 reflected the service hours, net heat rate, gross generation, net generation, and startups for each generating unit at the three plants. The attachments also reflect detailed daily and month-to-date information for each generating unit. The monthly information includes details on the following datasets for each unit (to the extent applicable):

EXNIDIT 6-23	
Generating Unit Datasets Us	ed In Generating Station Reports for 2010
Group Gon., Marst	
Aux, Unace, MINI	
Nat Gen. Militi	
Hat HPL BTLBOWN	
Cost Burned, Tons	
Station Part Pieto %	
Canadity Factor %.	
WW RL LEADIN G	
Even Rate, LB/LB	
Make Up, KLBS	
Make Up %	· · ·
Cost PL LENWH Gr	
Coal Hit Vel, BTUILB	
Gross Pysk	
DayThne Gr Peak	
Not Pesk	
Dep/Time Het Poek	
Service House	
Huni Cua), Milder U	
Total Heat, MARTE	
Skoom Own., KLBS	
Cost Equar Oil, KLOB	
ON HI VAL BTLAGAL	
Oil On Hand	
OF Received, GAL	
Distant, MANYA	
Diesel Cit, Gati	
Total Oll. GAL	
Service OII, GAL	
Heat to Service Oil	
Sint Up OIL GAL	
Heat in Stan Up Of	
Autolitary Boilter Oil	
Hoat in Asse Boller Of	
Heat in Ca	
Unesione Usage	

DP&L has reasonable procedures in place to account for and collect plant fuel burn related information.

Review Related To Fuel Supplies Owned Or Controlled By The Company

DP&L's response to data request LA-2010-34 stated that neither the Company nor their affiliates own or control any coal mines or entities that supply fuel to the Company.

Review Related To Purchased Power

DP&L's responses to LA-2010-37 through LA-2010-39 provided documentation relating to the review of purchased power. LA-2010-37 asked the Company to provide: "For purchases of power recorded in July 2010 that are included in the FAC, please provide the related invoices, and paid cash voucher or cash payment receipt". In response to LA-2010-37, the Company provided (1) copies of invoices for July 2010, (2) "Available Power Statements" from Ohio Valley Electric Corporation ("OVEC"), and (3) PJM weekly invoices and billing detail. Larkin attempted to trace the amounts from the July 2010 power purchase documentation provided to DP&L's general ledger (Account 555, pages of which were provided in LA-2010-58&59). We were initially unable to tie out any of the amounts. In response to our inquiry regarding this issue, DP&L provided supplemental support for the invoices and OVEC Available Power Statements from which Larkin was able to trace the amounts from those documents to the general ledger and/or the RA workpapers provided with LA-2010-58&59. As it relates to the weekly PJM invoices, the Company provided the following narrative:

This note describes how an invoice from the PJM Interconnection (PJM) ultimately impacts our development of the Ohio Retail Jurisdictional Fuel Factor (Fuel Factor).

Invoices from PJM include many charges and credits that are not associated with the development of the Fuel Factor. As examples, there are numerous transmission and other related costs and credits that are associated with transmission and other operations. These are not included in Dayton Power and Light's (DP&L's) Fuel Factor, but are included in other separate retail riders (Transmission Cost Recovery Rider (TCRR) and Reliability Pricing Model (RPM) Rider).

The PJM invoices also include DP&L's spot market sales to wholesale customers which do not affect the Fuel Factor.

DP&L takes the total amount of purchased power from the PJM invoice after backing out the non-fuel items discussed above, and assigns it to either wholesale customers or retail customers (per the February 24, 2009 Stipulation, this includes the average for both DPLER and standard service offer customers) based upon their actual hourly use of power.

The retail purchased power is then used as part of the average total fuel and purchased power cost for retail customers to arrive at the amount allocable to the Ohio Retail Jurisdiction. This is then included in the Fuel Factor. A hypothetical example follows:

Description	Amount
Total PJM Invoice	\$ 3,000,000
Less: non-fuel amounts discussed above	\$ (1,000,000)
Purchased Power	\$ 2,000,000
Less: amount of purchased power related to wholesal	\$ (200,000)
Amount related to retail	\$ 1,800,000
Less: proration to DPLER	\$ (800,000)
Amount related to Ohio Jurisdictional Fuel Factor	\$ 1,000,000

Since the process for allocating the appropriate level of PJM costs to the Fuel Rider is fairly complex, as described above, Larkin believes that the Company should include additional documentation in its RA workpapers that clearly bridges the gap between total PJM costs and the amount(s) allocated to the Fuel Rider. Therefore, the Company should provide a better audit trail for tracing its purchased power costs in the next audit period.

Demurrage

Demurrage, in general, relates to the delaying of a ship, barge, railway wagon, etc., caused by the charterer's failure to load, unload, etc., before the time of scheduled departure and to the extra charge required as compensation for such delay. DP&L incurs demurrage charges related to the barging of coal and other materials primarily to the Stuart and Killen plants it operates, which are located on the Ohio River and are served by barge delivery, when delays occur in the unloading of such barges. The Company stated in response to Onsite 35 that it does not receive demurrage detail from jointly-owned power stations operated by partners.

Managing barge deliveries to minimize demurrage charges is one aspect of the overall least-cost management of fuel procurement. DP&L records demurrage charges as part of its cost for the transportation of coal. Demurrage costs are recorded into the coal inventory account (Account 151) and become part of the fuel cost for coal (Account 501) when the coal is burned.

During the 2010 audit period, DP&L incurred net demurrage costs of approximately This was the second Exhibit 6-25 Net Demurrage Charges For



In 2010, the highest amount of monthly demurrage charges was incurred by DP&L in March DP&L's response to Onsite 37 provided the following detailed explanations for the higher than average amount of demurrage incurred in that month:

The primary contributors to the March 2010 demurrage bill being higher than average were 1) high water levels, 2) bias testing at both Killen Station and Stuart Station, and 3) the billing process for demurrage.

1) High Water Levels

On March 13, 2010, DP&L's stations reported that the river level was rising at a rapid rate. This began to alter DP&L's unloading patterns because DP&L's boat crew had to maintain all barges in the harbor (re-tying as needed) while continuing to supply barges to be unloaded. On March 15, 2010, the stations indicated that due to river currents that only one barge could be put on the unloading string at a time. These issues caused barges to stay in the harbor longer causing more demurrage to be accumulated. Also on March 15, 2010, DP&L's barge supplier indicated that due to high water the Big Sandy River was unavailable for suppliers to load which last until March 18, 2010. The Kanawha River was unavailable to load from March 15 through March 17. This caused barges to be delivered less evenly (grouping larger numbers of barges in a tow) which also caused additional demurrage.

2) Bias Testing

In March of 2010 both Killen Station and Stuart station performed a bias test for the sampling systems which contributed to the higher than average demurrage costs.

Bias testing a sampling system is the method of comparing two sets of samples and looking for an unacceptable variation in the quality parameters. The goal is to ensure that taking a mechanical sample in no way changes the inherent properties of the coal. One set is taken by the sampler and the other is taken by stopping the belt and gathering a manual sample. 20-30 sets are typically used, and variations must be minimal (range of variation must also contain zero).



3) Demurrage Billing

The process for billing demurrage charges and when they are received also contributed to the higher than average demurrage bill for March.

In addition to looking at events in March, one must also look at factors that occurred in previous months. Some of the factors in the prior months that, in-part, accounted for the higher than average March demurrage bills were as follows: high water that occurred in both January and February, Greenup Locks and Dam miter gate failure, and Markland Locks and Dam gate failure. The Greenup Locks and Dam miter gate failed on January 27. There were intermittent closures to both lock chambers during this miter gate failure until February 25. The Markland Locks and Dam gate failed on October 5, 2009 which caused delays lasting until March 2010. These delays caused tows to arrive less predictably and in high numbers over during short periods of time, and as a result the number of barges in harbor peaked at the barges during March. DP&L was able to get the harbor count down to a level of barges by the end of the month.

...

In summary, the three contributing factors collectively caused the number of barges to be increased and the number of barges unloaded to be reduced (for a period of time), all of which accumulates higher than average demurrage costs for March 2010 as compared to the balance of the year.

DP&L's explanation also identified the following actions taken by the Company throughout the year to mitigate demurrage:



DP&L provided additional explanations of how it weighs and evaluates the cost of incurring demurrage with other factors in managing its coal inventory and plant coal burn, in its response to Onsite 38:





Conclusions and findings:

DP&L is appropriately accounting for the cost of demurrage as part of the transportation cost of delivering coal to the generating plants.

DP&L has provided reasonable explanations for the above average demurrage costs incurred in March 2010 and for how it weighs and evaluates the cost of incurring demurrage with other factors in managing its coal inventory and plant coal burn.

As described in the response to Onsite 37, DP&L has taken various actions in 2010 throughout the year in efforts to mitigate demurrage costs.

Review Related To Service Interruptions And Unscheduled Outages

Documentation relating to the review of Service Interruptions and Unscheduled Outages includes DP&L's responses to data requests LA-2010-40 and LA-2010-41.

The table below illustrates a few examples of the longest forced outages at DP&L's generating units¹⁰ during 2010 from DP&L's response to part 1 of LA-2010-41:

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¹⁰ The listing provided by DP&L in response to data request LA-2010-41 included forced outages experienced during 2010 at DP&L-operated and joint-owner operated generating units.

Exhibit 6-26 Examples of Longest Forced Outages



Data request LA-2010-40 asked about customer power supply interruptions during the review period January through December 2010. In response, DP&L stated that they do not have any customers that could have experienced an interruption during the review period of January through December 2010. DP&L also stated that their customers may have agreements with their Certified Retail Electric Service (CRES) provider for interruptible load, but are not subject to DP&L's SSO fuel rate.

LA-2010-41 requested DP&L to identify instances during the review period in which the Company's generating units experienced unscheduled outages and to provide documentation concerning the following:

- 31. The cause(s) of the outage.
- 32. Steps taken by the Company to minimize the impacts of the unscheduled outage.
- 33. Efforts made to secure replacement power, if applicable.
- 34. The methodology employed to price the replacement power, if applicable.
- 35. The cost impacts resulting from the periods during which the unscheduled outage occurred.

In response to item 1, DP&L provided and Excel file, LA-2010-41 Part 1 Unscheduled Outages.xlsx, which listed information relating to unscheduled outages at DP&L's generating units during the review period, including the unit name, starting and ending dates of the outage, the duration of the outage, and a brief description of what caused the unscheduled outages.

With respect to items 2 and 3, DP&L explained that the following three points need to be made before discussing the steps taken by the Company to minimize the impacts of the outages: (1) Jurisdictional customers receive the least cost generation units; (2) DP&L is part of the PJM RTO and therefore participates in the PJM energy market, which uses PJM's Security Constrained Economic Dispatch Model (FIX) to "ensure that the least cost unit is being dispatched system wide to reliably meet the next MW of load needed"; and (3) DP&L's position is managed on a portfolio basis so that all available resources in the impact evaluation of the outages.

DP&L explained further that in order to minimize the impacts of the outage, DP&L will determine the impact on the retail position, taking in to consideration the operational constraints of the units. If the price of the available unit is higher than the market price, the Company will make a decision regarding whether it would be more economical to make a bilateral purchase or purchasing through the PJM energy market. The customer will always receive the least cost stacking of the generation resources. These steps are detailed in DP&L's Standard Operating Procedure ("SOP") #450 and #455. These same SOPs, provided in LA-2010-54, also explain how to secure replacement power.

In response to item 4, the methodology employed to price the replacement power, DP&L stated it will:

... review national weather forecasts, similar day and recent clearing prices, PJM system loads, check for significant unit outages across the PJM footprint, monitor what is being traded, and use all of that information to make a judgment on reasonable prices for replacement power.

With respect to item 5, the cost impacts resulting from the periods during which the unscheduled outage occurred, DP&L stated that the cost impact will depend on the retail position at the time of the outage and where the unit is in the supply stack. If the generator was not serving retail load on the day of the outage, there would be no cost impact to the retail customers. If the generator was serving retail load, the energy would be replaced by the most economical of either the next available resource in the supply stack or power purchases. After the day the generator initially went offline, the remaining resources would be stacked and the customers will use the least cost resources from DP&L's portfolio for that day.

Larkin obtained and reviewed DP&L's confidential system stack information¹¹ for a period before, during and after a significant unit outage at DP&L that occurred during the summer of 2010. Our review of such information was consistent with DP&L's representation that resources are stacked such that DP&L's retail customers are assigned the least cost resources from DP&L's portfolio for that day.

Audit Trail for FUEL Rider Filings, Supporting Workpapers and Documentation

DP&L provided documentation relating to the audit trail for its Fuel Rider filings in its responses to data requests LA-2010-43, LA-2010-45 through LA-2010-48, and LA-2010-52, among others.

Data request LA-2010-43 asked for a complete set of supporting workpapers for all calculations in the FUEL Rider filings for the review period January through December 2010 and/or which pertained to costs incurred or revenues recorded in the review period. In response, DP&L provided Fuel Cost forecasts for its January-February, March-May, June-August, September-November, and December 2010 (through February 2011)

¹¹ As provided by DP&L in response to data request Onsite-12.

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filings. DP&L also provided tables showing total retail sales, revenue class to tariff class conversions, and a 12 month average conversion.

Data request LA-2010-45 asked the Company to provide a complete audit trail for all amounts in the RA portions of the FUEL Rider filings. In response, the Company referred to the response to LA-2010-46.

Data request LA-2010-46 asked the Company to provide a complete audit trail for all amounts in the RA portions of each sub-account of purchased power in the FUEL Rider filings. In response, DP&L provided:

- The 2010 monthly actual Fuel Recovery calculations supporting the recorded journal entry (July 2010 was provided in response to LA-2010-58 and LA-2010-59; January 2010 was provided in response to LA-2010-60 and LA-2010-61)
- Summary calculation for Fuel Recovery Derivative Gain Loss Adjustment
- Summary calculations for fuel cost adjustments from the Fuel Application
- Summary calculation for maintenance adjustment
- Summary calculations for various formula errors found in the Fuel Recovery calculations for December 2010
- Supporting workpapers for the summary sheets

Data request LA-2010-47 asked the Company to provide all Excel files that were used in producing the FUEL Rider filings for the review period. Data request LA-2010-48 requested all Excel files that were used in producing the supporting workpapers for the FUEL Rider filings for the review period. In response, DP&L referred to the responses to LA-2010-42 and LA-2010-43.

Larkin reviewed DP&L's audit trail for Fuel Rider includable costs, focusing on the test month of July 2010 and also selectively verifying actual cost contained in DP&L's RAs to supporting documentation. We conclude that DP&L has maintained adequate audit trail documentation for 2010.

A discussion of our review of DP&L's accounting documentation for its Optimization Trades in 2010 is presented below in a subsection of this Chapter devoted to that issue.

Renewable Energy

DP&L is subject to the compliance standards as set forth in Section 4928.64 of the revised Ohio Code as it relates to an electric utility being required to provide electricity from alternative sources. Specifically, Section 4928.64, subsection (B) states in part that:

The baseline for a utility's or company's compliance with the alternative energy resource requirements of this section shall be the average of such total kilowatt hours it sold in the preceding three calendar years, except that the PUCO may reduce a utility's or company's baseline to adjust for new economic growth in the utility's certified territory or, in the case of an electric services company, in the

company's service area in this state. Of the alternative energy resources implemented by the subject utility or company by 2025 and thereafter:

Half may be generated by advanced energy resources;

At least half shall be generated from renewable energy resources, including onehalf percent from solar energy resources, in accordance with the following benchmarks:

Exhibit 6-27 Renewable And Solar Benchmarks

	Renewable	Solar
By End	Energy	Energy
of Year	Resources	Resources
2009	0.25%	0.004%
2010	0.50%	0.010%
2011	1.00%	0.030%
2012	1.50%	0.060%
2013	2.00%	0.090%
2014	2.50%	0.12%
2015	3.50%	0.15%
2016	4.50%	0.18%
2017	5.50%	0.22%
2018	6.50%	0.26%
2019	7.50%	0.30%
2020	8.50%	0.34%
2021	9.50%	0.38%
2022	10.50%	0.42%
2023	11.50%	0.46%
2024 and beyond	12.50%	0.50%

At least one-half of the renewable energy resources implemented by the utility or company shall be met through facilities located in this state; the remainder shall be met with resources that can be shown to be deliverable to this state.

The Stipulation, at page 6, paragraph 6 states the following with respect to renewables:

DP&L will implement an avoidable Alternative Energy Rider ("AER") as filed in the Application, subject to annual true up of actual costs incurred. Annual true up will take place no later than June 1 each year by filing an ATA filing. DP&L will make a filing at the Commission to seek Commission approval if DP&L seeks a nonbypassable AER charge in the future.

As described in the response to Onsite No. 15, DP&L identified and segregated the cost of renewable purchases that exceeds the energy value of the power, and removes that cost from the Fuel Rider-includable costs. DP&L recovers the cost of renewables via the AER discussed above.

DP&L's response to data request Onsite No. 15 provided a breakout of DP&L's 2010 biomass and biodiesel expense between (1) the energy value assigned to the Fuel Rider, (2) the renewable portion that was assigned to the AER, and (3) amounts designated as "remaining expense", which is attributable to DPLER. By combining the energy value portions of the July 2010 biomass and biodiesel expense with the portion assigned to DPLER, Larkin traced these amounts to the general ledger as well as to the Company's RA workpapers for July 2010. No exceptions were noted. The removal of the DPLER portion of these expenses is included in the calculations within the RA workpapers, which ensures that such costs are not included in the Fuel Rider.

Reconciliation Adjustments Audit Trail

As discussed previously, Larkin requested that DP&L provide a complete audit trail for all amounts in the RA portions in each of the Company's quarterly Fuel Rider filings. Specifically, the information requested by Larkin included the following:

LA-2010-45

The accounting records and other documentation needed to trace each dollar amount in the RAs from the Rider FAC filings to the fuel ledger, from the fuel ledger to the general ledger, and from the fuel ledger to the purchase orders and invoices.

The complete documentation to trace the energy and system loss quantities in the Rider FAC filings to the source documents.

All journal entries, journal entry supporting documentation and workpapers related to recording RA adjustments in the Company's accounting records.

Provide all calculations and supporting documentation related to computing RA adjustments in the Company's Rider FAC workpapers.<u>LA-2010-46</u>

The accounting records and other documentation needed to trace each dollar amount in the RAs through the general ledger, and from the general ledger to the purchase orders and invoices.

The complete documentation to trace the purchased power costs in the Rider FAC filings to the source documents.

All journal entries, journal entry supporting documentation and workpapers related to recording purchased power costs in RA adjustments in the Company's accounting records.

Provide all calculations and supporting documentation related to computing purchased power costs in RA adjustments in the Company's Rider FAC workpapers.

The Company combined these two data requests and designated its response as LA-2010-45&46. In this combined response, the Company provided a comprehensive Excel workbook for each month of 2010 with the exception of January and July. DP&L provided the accounting detail for January 2010 in its combined responses to LA-2010-60&61, and for July 2010 in LA-2010-58&59. These monthly Excel workbooks are DP&L's source documentation for the amounts reflected in DP&L's RA portion of its quarterly Fuel Rider filings.

As noted previously, Larkin selected July 2010 as its test month for this phase of DP&L's Fuel Rider audits. As such, data requests LA-2010-58 and LA-2010-59 requested the Company to provide the following data:

LA-2010-58

A complete audit trail from (1) the Company's quarterly FAC filings to (2) the FAC workpapers, to (3) the general ledger balances for each of the accounts listed in LA-2010- 57^{12} and any other accounts used by DP&L for the July 2010 actual RA fuel costs of \$30,865,717.

LA-2010-59

A complete audit trail from (1) the Company's quarterly FAC filings to (2) the FAC workpapers, to (3) the general ledger balances and accounting records used by DP&L for the July 2010 actual RA revenue of \$25,194,126.

In its combined response, which is designated as LA-2010-58&59, DP&L provided two comprehensive files. The first was an Excel file similar to those provided with LA-2010-45&46 titled "Fuel Recovery Actual July 2010 – Calculation of Fuel Deferral and Journal Entry Support for July Filing" ("Excel file") and the second was a PDF file titled "July 2010 - 10-12-10 Journal Voucher and Calculation Support" ("PDF file"). On the first tab of the Excel file, the Company provided a narrative which stated in part:

The purpose of this workbook is to calculate the over/under recovery of Fuel Costs, in accordance with the Fuel Rider stipulation, and the record the associated regulatory asset or liability.

The rest of this tab contained an overview which briefly described the contents of the Excel file which is comprised of Tabs .1 through .23. This overview included the following components:

Input Tabs – These tabs are linked to the various Calculation and Allocation tabs in order to generate the Fuel Rider Over/Under Recovery (Deferral or Liability).

Reconciliation Tab – There is one reconciliation tab which is completed separately after all calculations have been finalized and journal entries recorded. The reconciliation tab reconciles the Total Calculated Deferral from within this spreadsheet to the recorded Fuel Deferral in the general ledger.

Allocation and Output Tabs – These tabs are where the retail costs are allocated between retail and DPLER and billed and unbilled.

Summary Tabs – These tabs serve as the summaries of the dollars and MWhs in the Fuel Deferral. They summarize the information in Tabs .9 through .23 and are summarized by type of cost and plant as well as reflecting the retail/wholesale split.

Calculation Tabs – These tabs serve as the primary calculation tabs for the various expenses included in the Fuel Rider recovery calculation. Specifically, these tabs

¹² LA-2010-57 requested the DP&L provide detailed general ledger pages for 2010 for the following accounts: 501, 512, 403, 456, 509, 547, 555, 421, 426, 411.8 and 411.9.

calculate the amount of expense to be allocated between retail (including DPLER) and wholesale costs for each unit within each plant.

In terms of the expense and revenue amounts that are reflected in the RA portion of DP&L's quarterly Fuel Rider filings (i.e. Schedule 2 from such filings) the primary tabs from the Excel file associated with these amounts are Tabs .5 through .7. Tab .7, which is titled "Summary \$ Sheet", summarizes the total expenses that DP&L has included in its Fuel Rider after allocating such expenses between retail (including DPLER) and wholesale. The calculations from Tabs .9 through .20 flow through to Tab .7. The FERC accounts below (from Tab .7) represent the costs that DP&L has included in its Fuel Rider¹³. The following list shows which tab from the Excel file relates to the FERC accounts listed below:

- 501 Steam Production (Tab .9)
- 501 Steam Plant Fuel Oil Consumed (Tab .10)
- 501 Steam Plant Fuel Handling (Tab .11)
- 512 Maintenance on Coal Handling Equipment (Tab. 12)
- 403 Depreciation Expense on Coal Handling Equipment (Tab .13)
- 456 Coal Sales (Tab .14)
- 456 Heating Oil Realized Gains or Losses (Tab .15)
- 509 Allowances Consumed (Tab .16)
- 547 Gas and Diesel Peakers of DP&L (Tab .17)
- 555 & 565 Purchased Power (Tab .18)
- 421 Purchased Power Realized Gain (Tab .19)
- 426 Purchased Power Realized Losses (Tab .19)
- 411.8 & 411.9 Allowance Sales (Tab .20)

In addition, DP&L included a line item on Tab .7 for the Company's system optimizations which are discussed in a separate section of this report. Tabs .21, .22 and .23 represent fuel cost MWhs, gas and diesel peaker MWhs and purchased power MWhs, respectively.

The DP&L retail and DPLER related costs on Tab .7 then flow through to Tab .6, which is titled "DP&L Allocation". This tab starts with the total combined retail and DPLER costs included in the FERC accounts referenced above. There is an allocation between DPLER and DP&L retail based on the ratio of DP&L's and DPLER's monthly MWh to the total billed monthly MWh, which are provided by the rates department. From there, the DP&L retail costs then flow through to Tab .5, which is titled "Allocation Spreadsheet". It is from this tab that the over/under recovery deferral is calculated by taking the difference between the DP&L retail costs and the billed monthly FUEL Rider revenues. The over/under recovery is then allocated between a billed and an unbilled deferral which is based on the ratio of DP&L's billed and unbilled monthly revenues and the billed deferral is flowed through to the Company's quarterly Fuel Rider filings.

¹³ As discussed in an earlier section of this report, DP&L included the costs from FERC Accounts 403 and 512 in its Fuel Rider despite not formally requesting that such expenses be included in the Fuel Rider in its ESP Application dated October 10, 2008.

DP&L also includes additional supporting documentation each month in the form of a PDF file, which contains reproductions of journal entries and other support used in calculating the RAs. The first four pages of the PDF file referenced above is comprised of the journal entries used by DP&L to record the billed and unbilled deferrals. The remaining pages of the PDF are DP&L's support for the amounts reflected on the various tabs within the Excel file. These documents are labeled as Worksheets S-1 through S-17. Of these documents, the primary support is from Worksheet S-12, which is titled "Fuel Recovery 2010 Oracle Report" and represents amounts recorded in the general ledger.

We conclude that DP&L maintains an appropriate audit trail for its Reconciliation adjustments, subject to some specific concerns articulated in other sections of this chapter.

Optimization Trades

Data request LA-2010-44 asked whether DP&L engaged in "active management" during the review period January through December 2010, and if so, to identify, quantify and provide the accounting documentation for each such transaction during that period. In addition, LA-2010-44 asked DP&L to fully explain the reasoning and estimated economic benefit that was anticipated for each transaction. In response, DP&L stated that they do not engage in "active management", but they do evaluate future needs and supply on a regular and active basis. DP&L stated that it purchases coal consistent with the guidelines of the Commodity Risk Management Policy Coal Hedge Target Ratio and maintains a flat and balanced position for managing the emissions allowance position.

The Company "optimizes" its coal position in order to reduce the cost of fuel and obtain "sharing" profits from the optimization trades. A 75/25 DP&L/customer sharing ratio was provided for in the February 24, 2009 Stipulation in Case No. 08-1094-EL-SSO.

As part of the Stipulation dated February 24, 2009 in Case No. 08-1094-EL-SSO and subsequently approved by the Commission in its Opinion and Order dated June 24, 2009, DP&L has implemented coal and coal/power optimizations¹⁴ which the Company states systematically lowers the fuel and purchased power costs and thus, results in reduced rates to its customers. Section 2 of the Stipulation (pages 3 and 4) states in part:

DP&L will implement a bypassable fuel recovery rider to recover retail fuel and purchased power costs, based on least cost fuel and purchased power being allocated to retail customers. To calculate the rider, jurisdictional emission allowance proceeds and twenty-five percent of jurisdictional coal sales gains will be netted against the fuel and purchased power costs.

(Emphasis supplied.)

DP&L's response to LA-2010-44 stated that it performs such "optimizations" in one of ways:

¹⁴ In 2010, DP&L implemented ten coal and not coal/power "optimization" trades.

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During 2010, DP&L engaged in ten "optimization" deals, which are labeled as A through J in the following table:

Exhibit 6-28 Listing of Optimization Deals



DP&L applies system optimization by initially recording 100% of jurisdictional net accounting gains to be included in the Fuel Rider and then charges 75% of the jurisdictional share of optimization benefits back to the Fuel Rider. The remaining 25% of the jurisdictional share of gains and losses associated with coal sales, net of replacement coal costs are credited to retail customers. DP&L has stated that no optimization transaction will occur unless it results in a net decrease in costs to retail customers. DP&L's response to LA-2010-44, as it relates to coal optimization transactions, stated in part:



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Documentation for each optimization transaction was provided in response to LA-2010-44, including explanations and estimates of the value of each optimization as well as the associated accounting documentation. As part of this documentation, the Company provided a brief narrative describing the specific details of each optimization including the type of optimization (e.g., time swap), term of the optimization, transaction date, transaction number(s), a description of the optimization as well as a summary of the benefit to the Fuel Rider. The following Exhibit summarizes what the Company's response indicated was the net benefit of each optimization to the FUEL Rider per LA-2010-44.

Exhibit 6-29





The electronic versions of the spreadsheets that reflected the accounting details of Optimizations A through J that DP&L had originally provided in LA-2010-44 were in PDF format. In order to facilitate our review of the optimization transactions, Larkin requested that DP&L provide these spreadsheets in Excel format in Onsite No. 46. Upon being provided the optimization spreadsheets in Excel format, Larkin noted that the Company had adjusted the amounts for each optimization transaction. As noted above, the amounts provided for Optimizations A through J in LA-2010-44 were estimates and did not represent final amounts. In addition, the Company's made adjustments to Optimizations A through J (per Onsite No. 46) result in an overall adjustment in the amount of be December.

DP&L provided its RA workpapers for each month of 2010 in the responses to LA-2010-45&46 (Jan-Dec 2010 – estimates and actuals), LA-2010-58&59 (July 2010 only), LA-2010-60&61 (January 2010 only) and Onsite No. 10 (December 2010 only). These workpapers include the monthly optimization amounts, of which the DP&L retail portion is reflected in the Fuel Rider. The following Exhibit summarizes the monthly optimization amounts that are reflected in the Company's RA workpapers:

Exhibit 6-30



Charges to FUEL Rider From DP&L's 2010 Optimization Trades

Larkin also noted that DP&L intends to make a correction (credit) of (40,185) for the optimization trades. DP&L has indicated that it would post the (40,185) in April 2011. Larkin independently calculated that correction and confirmed the amount.

Findings¹⁵:

DP&L made ten optimization trades in 2010.

DP&L's charge to fuel costs (before application monthly retail jurisdictional ratios) totaled **Example 1** A true-up of \$28,901 was included in December 2010, the jurisdictional share of which should be allocated based on the appropriate monthly allocators for the months across which the true-up is properly assigned.

DP&L has maintained detailed audit trail documentation for its 2010 charges and credits to the Fuel Rider for its 2010 optimization trades. However, this finding pertains solely to the Company's audit trail documentation and does not address EVA's recommended adjustments to the optimizations (discussed in the management audit portion of this report.)

Recommendation:

DP&L's posting of corrections for optimization trades should be done in a manner that recognizes the retail Fuel Rider ratios that were applicable in the months in which DP&L had originally included optimization costs in the Fuel Rider.

Accounting for Emission Allowances

DP&L provided documentation related to accounting detail associated with costs and revenues, purchases and sales of emission allowances, and monthly emission allowance inventory in response to LA-2010-49 through LA-2010-51.

Data request LA-2010-49 asked the Company to provide the detailed general ledger pages for each account that contains costs and/or revenues included in the FUEL Rider filings. In response, DP&L referred to its responses to data requests LA-2010-5 and LA-2010-57.

Data request LA-2010-50 requested detailed general ledger pages for all purchases and sales of emission allowances ("EA") and for gains or losses realized on such purchases and sales of EAs. In response, DP&L provided the requested detail regarding the gains realized on the sales of EAs. The Company referred to the response to LA-2010-51 for a schedule of emission allowance purchases and sales.

The following table summarizes for DP&L the emission allowance purchases, sales, and gains and losses included in the Fuel Rider that occurred during the January through December 2010 review period.

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¹⁵ Please note that EVA has additional findings and recommendations in the Management Performance sections of this report concerning DP&L's optimization trades.
Exhibit 6-31 DP&L Emission Allowance Activity



To allocate the emission allowance sales gains and losses to the Fuel Rider, DP&L used an 80/10/10 ratio, where 80% is the Retail Allocation Factor; 10% is the DPLER Allocation Factor; and the remaining 10% is the Wholesale Allocation Factor. This allocation process was used from January 2010 through July 2010. Beginning August 2010 and forward, DP&L uses a new factor. This new factor, which is updated monthly, uses the cumulative calendar MWh sales for these three groups of customers to allocate the gains or losses of emission sales in each month. The mid-period change in the allocation ratio as applied by DP&L resulted in shifting the allocation of net EA sales gains and increasing retail fuel cost by approximately \$5,600.

Data request Onsite 13 asked DP&L to provide supporting documentation for the application of this ratio and to show how it was developed. DP&L's response provided the requested documentation. Because the mix of DP&L's customers is changing over time, with customers switching to alternative providers (including DPLER), we recommend that DP&L update the allocation ratio used to allocation emission allowance sales gains annually.

Data request LA-2010-51 asked DP&L to provide its monthly emission allowance inventory (quantity of allowances and cost) and to show how it was allocated between native and non-native customers. In response, DP&L referred to its responses to LA-2010-45 and LA-2010-46, which show EA allocations between native and non-native customers.

DP&L's response to LA-2010-51 included an attachment that reflected DP&L's monthly EA inventory balances. The table below summarizes for DP&L the monthly EA inventory balances for each month of the January through November 2010 review period.

Exhibit 6-32 DP&L Emission Allowance Inventory



Application of FUEL Rider Rates to Customer Bills

In order to verify that DP&L has included the correct fuel rider rates on its electric bills, Larkin reviewed a sample selection of monthly bills from the period April 2010, which were provided in response to Onsite 29. This sample included 30 customer billing statements with each reflecting a different billing rate. We recalculated the FUEL Rider charges by multiplying the fuel rates (per Tariff Sheet G28) for each rate type included in the sample by the usage indicated on each of the customer billing statements and then compared the results to each sampled customer's billing statement by the line item "Fuel Cost Adjustment". During this procedure, the following issues were noted for which the Company provided explanations:

• The Company made voltage adjustments to four of the 30 sampled customer billing statements. Two of these voltage adjustments increased consumption and two decreased consumption. The Company explained that the voltage adjustments are a metering issue whereby there are occasions where secondary service level customers are metered on the high side of the transformer (i.e. the primary service level). When this occurs, billing demand and energy are adjusted downward by 1% to account for losses in the transformer. In addition, there are occasions when this occurs for the

primary service level whereby customers are metered on the low side of transformer, so billing demand and energy are adjusted upward to account for losses in the transformer. Voltage adjustments for the secondary and primary service levels are explained in Tariff Sheets D19 and D20 as noted below:

Tariff Sheet D19

The above rates are based upon Secondary Voltage Level of Service and metering. When metering is at Primary Voltage Level of Service, both the kilowatt billing demand and the energy kilowatt-hours will be adjusted downward by one percent (1%) for billing purposes.

Tariff Sheet D20

The above rates are based upon Primary Voltage Level of Service and metering. When metering is at Secondary Voltage Level of Service, both the kilowatt billing demand and the energy kilowatt-hours will be adjusted upward by one percent (1%) for billing purposes.

• The other issue Larkin noted had to do with billing statements with charges related to the private outdoor lighting service level. A review of Tariff Sheet G28 indicated that the rates for this category are reflected at the price per month instead of on a per kilowatt-hour basis as shown in the following table:

Exhibit 6-33 Monthly Price For Private Outdoor Lighting Service Level

Month	;
\$ 1.9155750	• •
\$ 3.9333140	
\$ 1.6346240	ļ
\$ 1.6857060	
\$ 1.0982630	
	Month \$ 1.9155750 \$ 3.9333140 \$ 1.6346240 \$ 1.6857060 \$ 1.0982630

As a result, it was unclear which fuel rate to apply to the private outdoor service level billing statements from the sample. The Company explained that the private outdoor lighting service level is billed at the secondary voltage level and therefore is fixed at the secondary fuel rate of \$0.025541 per kWh. In addition, the fixed kWh amounts for the private outdoor service level are listed in Tariff Sheets D23 and G16. As shown in the table below, by multiplying the fixed kWh for each category of the private outdoor lighting service level by the secondary fuel rate of \$0.025541 per kWh, Larkin verified that the price per month for each category of the private outdoor lighting service level calculated to the prices shown on Tariff Sheet G28:

Exhibit 6-34 Verification of Private Outdoor Service Level Monthly Price

			Price Per
Private Outdoor Lighting	kWh	Fuel Rate	Month
7,000 Lumens Mercury	75	\$ 0.025541	\$1.9155750
21,000 Lumens Mercury	154	\$ 0.025541	\$3.9333140
2,500 Lumens Incandescent	64	\$ 0.025541	\$1.6346240
7,000 Lumens Fluorescent	66	\$ 0.025541	\$1.6857060
4,000 Luments PT Mercury	43	\$ 0.025541	\$1.0982630

After reflecting the voltage adjustments noted above and after applying the secondary service level fuel rate to the private outdoor service level categories in our calculations and comparing the results to the affected billing statements under the Fuel Cost Adjustment line item, no exceptions were noted. The table below summarizes the results of Larkin's analysis:

Exhibit 6-35 Summary of Customer Bill Analysis

			C	Calculated	Usage	Calcul	ated
Rate Type & Number	Usage	Fuel Rate		Fuel Bill	Adjustment	Fuel	Bill
Residential							
111	819	0.0255410	\$	20.92			
141	77	0.0255410	\$	1.97			
121	200	0.0255410	\$	5.11			
321	1,760	0.0255410	\$	44.95			
Secondary Single Phase			\$				
117	96	0.0255410	\$	2.45			
127	3,960	0.0255410			3,920	\$ 10	00.13
97	57	0.0255410	\$	1.46			
197	511	0.0255410	\$	13.05			
_841	4,345	0.0255410	\$	110.98			
Secondary Three Phase							
137	4,320	0.0255410	\$	110.34		1	
157	59,760	0.0255410			59,162	\$ 1,5	11.07
851	790	0.0255410	\$	20.18		·	
Primary							
187	126,041	0.0248201	\$	3,128.35			
167	12,400	0.0248201			12,524	\$ 3	10.85
387	59,970	0.0248201	\$	1,488.46	1	1 1	
801	5,208,112	0.0248201	\$	129,265.86			
Primary Substation						-	
188	2,831,281	0.0245397	\$	69,478. 7 9		1	
811	705,852	0.0245397	\$	17,321.40		:	
High Voltage							
158	2,486,499	0.0245397			2,511,364	\$ 61,62	28.12
168	4,363,810	0.0245397	\$	107,086.59			
Private Outdoor Lighting						1	
15	64	0.0255410	\$	1.63		•	
25	75	0.0255410	\$	1.92		:	
35	66	0.0255410	\$	1.69			
45	349	0.0255410	\$	8.91			
55	6,321	0.0255410	\$	161.44		•	
860	75	0.0255410	\$	1.92			
865	308	0.0255410	\$	7.87			
Schools							
162	12,480	0.0255410	\$	318.75			
Street Lighting						1	
65	140	0.0255410	\$	3.58			
85	1,710	0.0255410	\$	43.68		:	
	15,892,248			328,652.22		63,5	50.16

Larkin reviewed a sampling of customer billing information to test whether DP&L had accurately applied the FUEL Rider rates. No exceptions were noted after accounting for voltage adjustments, which are provided for in DP&L's tariffs and applying the secondary service fuel rate to private outdoor lighting.

Changes To Fuel, Purchased Power Procurement And Emission Allowance Procurement

Documentation related to the review of changes to fuel, purchased power procurement and emission allowance procurement during the period January through December 2010 includes DP&L's responses to LA-2010-53 through LA-2010-56.

Data request LA-2010-53 asked the Company to list and describe all organizational changes to the Company's Fuel, Purchased Power Procurement and Emission Allowance Procurement during the review period. In response, DP&L detailed several leadership and responsibility changes in Commercial Operations, Business Planning and Development, Logistic and Generation Operations, Purchasing, and Fuel Procurement. An organizational chart displaying these changes, as well as job descriptions of the personnel in these departments were provided in DP&L's combined response to LA-2010-55 and 56.

Data request LA-2010-54 requested information similar to LA-2010-53, although from a procedural versus organizational standpoint. In response to LA-2010-54, DP&L stated that there were two updates made in 2010 to the Commodity Risk Management policy. Updates were made to SOP #480, Startup and No Load Costs on December 1, 2010, and SOP #450, Energy Purchase Decisions and Dedications Procedure on August 26, 2010. SOP #455, Hourly Retail Position, was adopted on August 31, 2010. In addition, DP&L's response indicated that the Commercial Operations Sarbanes-Oxley flows are updated quarterly.

General Ledger Detail and Audit Trail

Data request LA-2010-57 requested general ledgers for various FERC accounts for the costs the Company requested in its proposed FUEL Rider. In response, DP&L provided the general ledger sheets for January through November 2010.

Data requests LA-2010-58 and LA-2010-59 asked DP&L to provide the audit trail from the Company's quarterly FUEL Rider filings to the FUEL Rider workpapers to the general ledger balances for each of the accounts included in DP&L's Fuel Rider and any other accounts used by DP&L for July 2010 actual RA fuel costs and revenues. In response, DP&L provided:

- The actual Fuel Recovery calculation supporting the recorded journal entry for July 2010
- The July 2010 journal voucher and calculation support

Data requests LA-2010-60 and LA-2010-61 asked DP&L to provide the audit trail from the Company's quarterly FUEL Rider filings to the FUEL Rider workpapers to the general ledger balances for each of the accounts requested in LA-2010-57 and any other accounts used by DP&L for January 2010 actual RA fuel costs and revenues. In response, DP&L provided:

• The actual Fuel Recovery calculation supporting the recorded journal entry for January 2010

• The January 2010 journal voucher and calculation support

Data request LA-2010-62 asked the Company to provide the complete audit trail from the general ledgers for each account listed in LA-2010-57 to the invoices, journal entries and other documentation that supports the costs recorded in the general ledgers for each FUEL Rider includable account and sub-account for July 2010.

In response, DP&L referred to LA-2010-58 and LA-2010-59 for the supporting documentation. Additional documentation, such as invoices, other journal entries, or any other supporting documentation, was made available during the onsite visit, February 21 through 24, 2011, and in response to Onsite data requests.

Internal Audits

Data request LA-2010-64 asked the Company to provide a listing and copies of any and all internal audit reports related to fuel procurement, synfuel, coal trading, fuel inventory management, purchased power, emission allowances, accounting for FUEL Rider-includable costs, portfolio optimization, energy sales, PJM charges and revenues, fuel and purchased power invoices, PJM invoices, allocation of PJM revenues and costs to Ohio retail load customers, allocation of other FUEL Rider includable costs and revenues to Ohio retail load customers, and/or other FUEL Rider related subject matter for the review period. DP&L provided three internal audit reports¹⁶ which were issued during 2010 in response to EVA-2010-1-37, each of which concerns the physical inventory of a DP&L-operated generating plant's coal pile:

- 40. Physical Inventory Report at the O.H. Hutchings Station (Issued October 21, 2010)
- 41. Limestone Physical Inventory Report at the Killen Station (Issued October 21, 2010)
- 42. Physical Inventory Report at the J.M. Stuart Station (Issued October 21, 2010)

The objective of these internal audits was to present the work performed and the data used to estimate the tonnage and quality of the coal inventory at the Hutchings and Stuart Stations and limestone at Killen Station. DP&L's procedures for physical coal pile inventory provide for the involvement of Internal Audit. The participation in the coal pile inventories by Internal Audit indicates that DP&L is following that part of its procedures.



¹⁶ Because of its size, DP&L has a relatively small internal audit department. Source: interview.

Data request Onsite No. 33 requested that the Company provide the accounting detail to demonstrate the impact(s) of the new coal supply agreement. In its confidential response to Onsite No. 33, the Company stated that







The memo provided with the confidential response to Onsite No. 33 also contained the following narratives related to the accounting treatment associated with the new contract:





Larkin asked DP&L to quantify the impact of the new Coal Supply Agreement on the Fuel Rider. DP&L provided two spreadsheets, each showing the approximate fuel rate impact of the Coal contract. The first spreadsheet reflects the impact of the contract on the Stuart Station, in which costs totaling approximately were allocated to DP&L's retail customers. The second spreadsheet reflects the impact of the contract on the Killen Station, in which the retail share of assumed costs was

Memorandum Of Findings And Recommendations

Our findings and recommendations are summarized in Chapter 1.

Report of the Management/Performance and Financial Audit of the Fuel Purchased Power Rider of The Dayton Power and Light Company (09-1012-EL-EFC)

6-1

EVA DATA REQUEST

As it applies to the period review period, January 1, 2010 through December 31, 2010, please provide the following information and documents:

Fuel Contracts

EVA-2010-1-1	Fuel contracts (coal, natural gas, oil, etc.) with amendments in effect at any time between
	January 1, 2010 and December 31, 2010.
EVA-2010-1-2	Term sheets or contract drafts for deals not yet signed
EVA-2010-1-3	Fuel purchase orders (coal, natural gas, oil) in effect between January 1, 2010 and
	December 31, 2010.
EVA-2010-1-4	Transportation (rail, barge, pipeline, etc.) and other contracts (limestone, etc.) in effect
	between January 1, 2010 and December 31, 2010.

Procurement Process

EVA-2010-1-5	Requests for Proposal (RFP) issued during 2010
EVA-2010-1-6	Bidders List for each RFP
EVA-2010-1-7	Bids received in response to 2010 RFPs
EVA-2010-1-8	Bid evaluations from same (print-outs from spreadsheet model)
EVA-2010-1-9	Decision memorandum for all purchases
EVA-2010-1-10	Documentation related to model used to evaluate bids.
EVA-2010-1-11	Contracts resulting from RFPs (if not provided under EVA-2010-1-1 or EVA-2010-1-4)

Coal Contract Performance

EVA-2010-1-12	Coal shipments by supplier by plant by month by contract for 2010 with quality and price
	(data should be provided electronically in excel files)
EVA-2010-1-13	Coal contract performance summary detailing contract shortfalls (over-shipments) at the
	beginning of 2010, performance during the year, and contract shortfalls (over-shipments)
	at the end of the year
EVA-2010-1-14	Coal contract compliance with contract quality specifications by appropriate period
	(semi-monthly, monthly, or quarterly)
EVA-2010-1-15	Coal contract dispute files

Fuel Purchases/Sales

EVA-2010-1-16	Coal purchases by plant by supplier by month by contract/purchase order (to	ons, quality,
	and price)	
EVA-2010-1-17	Gas purchases by month	
EVA-2010-1-18	Coal sales (if any) to third parties	

Performance

EVA-2010-1-19	Beginning and end-of-month inventory levels by plant and coal 2010	type (if available) for
EVA-2010-1-20	Results from two most recent physical inventory surveys	
EVA-2010-1-21	Unforced outages during 2010 with cause and duration	

EVA-2010-1-22	Plant operating statistics (operating availability, equivalent availability, capacity factors,
	and heat rates) for 2010
EVA-2010-1-23	Replacement power purchases during unforced outages in 2010

Environmental Compliance

EVA-2010-1-24	Status of environmental retrofit projects
EVA-2010-1-25	Emission allowance banks as of December 31, 2009 and December 31, 2010
EVA-2010-1-26	Emission sales and purchases during 2010 (tons and dollars)
EVA-2010-1-27	Emission allowance consumption by plant in 2010
EVA-2010-1-28	Forecast of emission allowance consumption by plant and year, 2010-2014
EVA-2010-1-29	Emission allowance strategy
EVA-2010-1-30	Potential compliance strategies related to reductions in greenhouse gas emissions

Miscellaneous

EVA-2010-1-31	Policy and procedures manual governing fuel procurement
EVA-2010-1-32	Most recent integrated resource plan
EVA-2010-1-33	Most current forecast of coal burn by plant for the 2011-2015 period.
EVA-2010-1-34	Coal specifications for each unit with minimums and maximums for each specification
EVA-2010-1-35	Any studies/memorandum related to coal sampling and coal quality issues
EVA-2010-1-36	Any special studies conducted in the last five years related to fuel issues.
EVA-2010-1-37	Any internal audits related to fuel and purchased power conducted in the last five years.

LARKIN DATA REQUEST

As it applies to the period review period, January 1, 2010 through December 31, 2010, please provide the following information and documents:

Minimum Review Requirements

LA-2010-1.	Company's procedures for accounting for fuel receipts, testing and payments.
LA-2010-2.	Company's procedures for weighing, testing and reporting coal burned.
LA-2010-3.	Company's procedures for recording purchases and interchanges of energy (it appears this can be limited to economic energy purchases that are included in the FPP)
LA-2010-4.	Description of how the Company accounts for fuel at jointly owned generation plants.
LA-2010-5.	Identification of any fuel amounts being deferred that affect the review period. If there are any, please identify such amounts by account and explain why they are being deferred.

Relating to Coal Order Processing

LA-2010-6.	A brief description of the Company's procedures for processing fuel purchase orders		
LA-2010-7.	Copies of fuel purchase orders for fuel purchases recorded in the month of July 2010.		
LA-2010-8.	Copies of approved purchase requisitions for the fuel purchases recorded in the month of July 2010.		
LA-2010-9.	Cash vouchers and payment documentation for the fuel purchases recorded in the month of July 2010.		
LA-2010-10.	Fuel ledger for January 2010 through December 2010.		
LA-2010-11.	Documentation (e.g., from the laboratory) for Btu adjustments for fuel purchases recorded in the month of July 2010. If there were none for July 2010 but were some in March, April or June, please provide the documentation for March, April or June 2010 Btu adjustments.		
LA-2010-12.	Freight cash vouchers for two days of coal receipts in July 2010 and copies of the portions of the corresponding coal received reports.		
LA-2010-13.	Two cash vouchers from each barge company for coal unloaded at Company plants during July 2010 and copies of the portions of the corresponding coal unloading reports and purchase orders.		
LA-2010-14.	Description of the Company's procedures for preparing monthly fuel analysis reports.		
LA-2010-15.	Copies of fuel analysis reports relating to fuel purchases recorded in the month of July 2010.		
LA-2010-16.	Identification of all pending or approved retroactive escalations that affect fuel cost for the review period.		

Relating to Station Visitation and Review of Company's Coal Processing Procedure from the Receipt of Coal to the Disposition of Fly Ash

- LA-2010-17. A description of the Company's coal receiving procedures and controls for shortages, overages or other discrepancies.
- LA-2010-18. A description of how the coal is weighed as received.
- LA-2010-19. A description of how freight bills and car number discrepancies are handled.
- LA-2010-20. A description of how damaged cars are checked and who instigates claims for shortages.
- LA-2010-21. A description of the Company's month end cutoff procedure for coal.
- LA-2010-22. A description of the Company's coal sampling procedures, including the frequency of coal sampling, how the coal samples are identified, and what control is exercised over forwarding coal samples to the laboratory.
- LA-2010-23. Scale calibration logs for January through July 2010.
- LA-2010-24. Description of procedure that is followed when coal scales are inoperable.
- LA-2010-25. Copies of laboratory sampling reports for coal purchases recorded in July 2010 to compare with purchasing and accounting records.
- LA-2010-26. A description of the Company's procedure for handling coal from the stockpile to the firebox or boiler.
- LA-2010-27. A description of the Company's procedure for taking physical inventories of coal and fuel oil, including the frequency of the physical inventories, how density tests are performed and whether the samples are accurate, how cutoff data is established, who controls the data, and how often cutoffs are established.
- LA-2010-28. Company's working papers on physical inventories for the review period.
- LA-2010-29. Accounting documentation for physical inventory adjustments recorded for the review period, including the general ledger, and fuel stock and consumption records.
- LA-2010-30. A description of the levels of review applicable to plant operating statistics.
- LA-2010-31. A copy of generating station reports for the review period.
- LA-2010-32. Identification of any Company internal investigations following through on generating station reports for the review period.
- LA-2010-33. Copies of the station reports for review period sent to the Company's general office for incorporation into company statistics and workpapers sufficient to trace the reports to the statistics.
- LA-2010-34. A description of how freight bills and barge number, coal quantity and quality discrepancies are handled.
- LA-2010-35. A description of how damaged barges are checked and who instigates claims for shortages.

Relating to Fuel Supplies Owned or Controlled by the Company

LA-2010-36. Please confirm that the Company and its affiliates do not own or control any coal mines or entities that supply fuel to the Company.

Relating to Purchased Power

- LA-2010-37. For DPL, for purchases of power recorded in July 2010 that are included in the FAC, please provide the related invoices, and paid cash voucher or cash payment receipt.
- LA-2010-38. Concerning system dispatch, during the entire review period, was the dispatch of the Company's generating units under the control of PJM? If not, please explain.

LA-2010-39. During the review period were any of the Company's generating units designated by PJM as "must run" for reliability or voltage control purposes? If so, please identify the units, hours, and cost/Mwh for each "must run" situation at the Company's generating units during this period.

Relating to Service Interruptions and Unscheduled Outages

LA-2010-40.

Identify any instances during the review period in which customers' power supplies were interrupted or requested to be interrupted, and provide documentation concerning:

- 1. the cause(s) of the interruption;
- 2. steps taken by the company to minimize the impacts of interruption;
- 3. efforts made to secure replacement power, if applicable;
- 4. the methodology employed to price the replacement power, if applicable; and
- 5. cost impacts resulting from the periods during which the interruptions occurred.
- LA-2010-41. Identify any instances during the review period in which the Company's generating units experienced unscheduled outages, and provide documentation concerning:
 - 1. the cause(s) of the outage;
 - 2. steps taken by the company to minimize the impacts of the unscheduled outage;
 - 3. efforts made to secure replacement power, if applicable;
 - 4. the methodology employed to price the replacement power, if applicable; and
 - 5. cost impacts resulting from the periods during which the unscheduled outage occurred.

Fuel Adjustment Clause (Rider FAC) Filings, Supporting Workpapers and Audit Trail Documentation

LA-2010-42.	Provide all of the Company's Rider FAC filings filed during the review period and/or which pertained to costs incurred or revenues recorded in the review period.
LA-2010-43.	Provide a complete set of supporting workpapers for all calculations in the Rider FAC filings for the review period and/or which pertained to costs incurred or revenues recorded in the review period.
LA-2010-44.	During the review period did the Company engage in "active management" of its fuel, purchased power, or emission allowance positions? If so, please identify, quantify and provide the accounting documentation for each "active management" transaction during this period. For each such transaction, please also fully explain the reasoning and estimated economic benefit that was anticipated for the transaction.
LA-2010-45.	For each Reconciliation Adjustment (RA) in an Rider FAC filing covering the review period, please provide a complete audit trail for all amounts in the RA portions of such filings, including:
	a. The accounting records and other documentation needed to trace each dollar amount in the RAs through from the Rider FAC filings to the fuel ledger, from the fuel ledger to the general ledger, and from the fuel ledger to the purchase orders and invoices.
	b. The complete documentation to trace the energy and system loss quantities in the Rider FAC filings to the source documents.
	c. All journal entries, journal entry supporting documentation and workpapers related to recording RA adjustments in the Company's accounting records.
	 Provide all calculations and supporting documentation related to computing RA adjustments in the Company's Rider FAC workpapers.
LA-2010-46.	For each sub-account of purchased power in a Rider FAC filing covering the review period, please provide a complete audit trail for all amounts in the RA portions of such filings including:

- a. The accounting records and other documentation needed to trace each dollar amount in the RAs through from the Rider FAC filings to the general ledger, and from the general ledger to the purchase orders and invoices.
- b. The complete documentation to trace the purchased power costs in the Rider FAC filings to the source documents.
- c. All journal entries, journal entry supporting documentation and workpapers related to recording purchased power costs in RA adjustments in the Company's accounting records.
- d. Provide all calculations and supporting documentation related to computing purchased power costs in RA adjustments in the Company's Rider FAC workpapers.
- LA-2010-47. Please provide all Excel files that were used in producing the Rider FAC filings for the review period.
- LA-2010-48. Please provide all Excel files that were used in producing the supporting workpapers for the Rider FAC filings for the review period.
- LA-2010-49. For the review period provide the detailed general ledger pages for each account that contains costs and/or revenues that are included in Rider FAC.
- LA-2010-50. To the extent not already being provided in response to other requests, for the review period, please provide the detailed general ledger pages for all purchases and sales of emission allowances and for gains or losses realized on such purchases and sales of EAs.
- LA-2010-51. For the review period please provide the monthly Emission Allowance inventory (quantity of allowances and cost) and show how this was allocated between native and non-native customers.
- LA-2010-52. Please provide DPL's most current estimates and projections of the deferred FAC costs currently through the end of the ESP term. In addition, please indicate the Company's estimate of the collection period necessary to fully recover the deferred FAC costs after the ESP terms ends, and provide an estimate of the prospective surcharge and rate impact.

Changes to Fuel, Purchased Power Procurement and Emission Allowance Procurement

LA-2010-53.	Please list and describe all organizational changes to the Company's Fuel, Purchased Power Procurement and Emission Allowance Procurement, during the review period.
LA-2010-54.	Please list and describe all procedural, policy and accounting changes to the Company's Fuel, Purchased Power Procurement and Emission Allowance Procurement, during the review period.
LA-2010-55.	Please provide the most current organizational chart(s) available showing in detail all personnel at the Company and affiliates who are involved in the purchase and management of Fuel, Purchased Power Procurement and Emission Allowances, the related accounting, and the preparation of Rider FAC filings.
L A-2010-56 .	For each person/position listed in an organizational chart that is provided in response to LA-2010-2010-53 and LA-2010-2010-55, please provide a complete job description.

General Ledger Detail and Audit Trail

LA-2010-57. Please provide detailed general ledger pages for 2010 for each of the following accounts:

- a. 501
- b. 512 (all subaccounts for coal-handling equipment)
- c. 403 (all subaccounts for coal-handling equipment)

	d. 456
	e. 509
	f. 547
	g. 555 (all FAC includable subaccounts)
	h. 421 and 426 (purchased power realized gains/losses; all FAC includable subaccounts)
	i. 411.8 and 411.9 allowance sales
LA-2010-58.	Please provide a complete audit trail from (1) the Company's quarterly FAC filings to (2) the FAC workpapers, to (3) the general ledger balances for each of the accounts listed in LA-2010-2010-57 and any other accounts used by DPL for the July 2010 actual RA fuel costs of \$30,865,717.
LA-2010-59.	Please provide a complete audit trail from (1) the Company's quarterly FAC filings to (2) the FAC workpapers, to (3) the general ledger balances and accounting records used by DPL for the July 2010 actual RA fuel revenue of \$25,194,126.
LA-2010-60.	Please provide a complete audit trail from (1) the Company's quarterly FAC filings to (2) the FAC workpapers, to (3) the general ledger balances for each of the accounts listed in LA-2010-2010-57 and any other accounts used by DPL for the January 2010 actual RA fuel costs of \$31,312,355.
LA-2010-61.	Please provide a complete audit trail from (1) the Company's quarterly FAC filings to (2) the FAC workpapers, to (3) the general ledger balances and accounting records used by DPL for the January 2010 actual RA fuel revenue of \$29,818,488.
LA-2010-62.	For the month of July 2010 please provide a complete audit trail from the general ledger detail for each account listed in LA-2010-2010-57 to the invoices, journal entries and other documentation that supports the costs recorded in the general ledger for each FAC-includable account and sub-account.
LA-2010-63.	Please provide workpapers and a complete audit trail for each month of 2010 for the costs assigned to off-system sales.

Internal Audits

LA-2010-64. Please provide a listing of and a copy of any and all internal audit reports related to fuel procurement, synfuel, coal trading, fuel inventory management, purchased power, emission allowances, portfolio optimization, energy sales, PJM charges and revenues, fuel and purchased power invoices, PJM invoices, allocation of PJM revenues and costs to Ohio retail load customers, allocation of other FAC includable costs and revenues to Ohio retail load customers, and/or other Rider FAC related subject matter for the review period.

LARKIN DATA REQUEST, SET 2

As it applies to the period review period, January 1, 2010 through December 31, 2010, please provide the following information and documents:

- LA-2010-65. The Company's response to LA-2010-38 states that: "in most circumstances during the review period, dispatch of Dayton's generating units were under the control of PJM. However, if a unit was required to run for a test, that was done under Dayton's control. In addition, Dayton's Generation Operators and Traders had the ability to start peakers when they were not requested by PJM."
 - a. Please identify each instance (date, time, plant and unit involved) during the review period when units were run for a test.
 - b. Please identify each instance (date, time, plant and unit involved) during the review period when when DPL started peakers when they were not requested by PJM.

LA-2010-66. The Company's response to LA-2010-12 states that: "DP&L did not receive any coal via rail in July 2010."

- a. Did DP&L receive coal by rail in any other months of 2010? If so, which months?
- b. Did DP&L receive any coal via barge in July 2010?
- c. Please provide freight cash vouchers for two days of coal receipts for coal received via barge in July 2010 and copies of the portions of the corresponding coal received reports.
- d. If no coal was received via barge in July 2010 but coal was received via barge in other months of 2010, please provide freight cash vouchers for two days of coal receipts for coal received via barge in each month of 2010 other than July 2010 and copies of the portions of the corresponding coal received reports.
- e. Please provide freight cash vouchers for two days of coal receipts for coal received via rail in each month of 2010 when coal was received via rail. Also provide copies of the portions of the corresponding coal received reports.

Onsite Data Requests

- Onsite 1 Provide the Line Loss study referenced in the Fuel filings. Onsite 2 Provide general ledger detail for fuel inventory account 151. Onsite 3 Provide general ledger detail for over/under recovery in account 182.4 Onsite 4 Provide general ledger detail for account 254. Onsite 5 Provide the depreciation study, account balances, and other workpapers in support of the Fuel Handling depreciation amounts used in the fuel filing. Onsite 6 Provide the monthly position reports provided to the Risk Management group for all months of 2010. Onsite 7 Provide Duke, AEP, and DP&L fuel bills for January, July, and the month showing the annual inventory adjustment. Also provide a month that demonstrates fuel transfers between power plants if not provided in the three months requested. **Onsite 8** Provide sales and fuel variance reporting that was included in the Executive report for January, July, and December, Onsite 9 Provide sales variance data from the Key Customer report for July and December. Provide the accounting workbook for December 2010 to complete the 2010 year. Onsite 10 Onsite 11 Provide a list of all confidential data requests. Onsite 12 Provide the unit stacking for July 12 and July 13 that shows the Conesville 4 outage impact. Provide the annual generation data that supports the allocation factor for emission Onsite 13 allowance sales. Onsite 14 Provide the handout presentation regarding IRP. Onsite 15 Provide the dates for Biomass consumption with the accounting detail to show how biomass is recorded. Onsite 16 Provide any coal contract signed in 2010 for future periods. Onsite 17 Provide a list of coal related RPFs issued for the last five years. Onsite 18 Provide the accounting detail showing all transfers of tons between Stuart and Killen for 2010. Onsite 19 Provide the purchase detail/contract for the Peabody 30k tons in 2010 Onsite 20 Provide FGD specifications for Stuart and Killen that include the SO2 and limestone specifications. Provide the limestone contract for 2010. Onsite 21 Onsite 22 Provide details on the 14 times power was purchased in advance for retail customers. Onsite 23 Provide cost information to complete the table to be provided by EVA. Onsite 24 Provide the diagram of the coal handling systems at Stuart station. Onsite 25 Provide the Credit Risk Management Policy. Onsite 26 Provide a list of people interviewed earlier in the year for purposes of preparing for the audit Onsite 27 Provide an updated organizational chart with Environmental added. Onsite 28 Provide documentation used for the treatment of coal transfers between power plants. Onsite 29 Provide the bill audit information for April 2010. Onsite 30 Provide the base coal amounts at Stuart Station in both total plant and DP&L
 - share for both 2009 and 2010 that shows the adjustment.

Onsite 31	Provide a memo or presentation that was relied upon for executive management to approve of the security security .
Onsite 32	Provide the cover letter regarding the annual inventory adjustment developed by internal audit.
Onsite 33 Onsite 34.	Provide the accounting detail to demonstrate the impacts of the provide a listing , by DP&L operated plant, by account, by month, of all demurrage charges in 2010.
Onsite 35.	Provide a listing, by account, by month, of demurrage charges incurred by DP&L at jointly owned plants operated by others.
Onsite 36.	Provide comparable information by plant, by month, of demurrage charges in 2008 and 2009.
Onsite 37.	Explain why demurrage charges recorded in March 2010 were so high. Identify and discuss situations at the DP&L operated plants which occurred related to those charges being so high.
Onsite 38.	Please explain how DP&L weighs and evaluates the cost of incurring demurrage with other factors in managing its coal inventory and plant coal burn.
Onsite 39.	Provide statistics on 2010 customer switching by month by customer tariff showing the number of customers and MWH that switched from DP&L jurisdictional to another provider. For jurisdictional customers switching to another provider, please also indicate the number of customers and MWH switching to the affiliate, DPLER.
Onsite 40.	When DP&L had an EFC, what specific accounts were included for determining fuel and purchased power costs?
Onsite 41.	Is DP&L aware of any other electric utilities in the U.S. that include accounts 403 (depreciation) and 512 (maintenance) in their fuel riders and/or fuel cost recovery tariffs? If so, please identify and explain.
Onsite 42.	Optimization trades. What amount of bonuses and incentive compensation was paid to DP&L and affiliate personnel related to the 2010 "optimization" trade results? Please provide details and calculations.
Onsite 43.	In response to Onsite 23, the January 21, 2011 confidential memo from Director Internal Audit, states, among other things: " we did identify some opportunities where the Coal Pile Inventory policy could be enhanced to clarify roles and responsibilities."
	a. Please identify and explain the opportunities that were identified.
	b. Identify and provide a copy of any emails, writings, notes and documents describing such opportunities.
Onsite 44.	Paragraph 2 of the 2/24/2009 Stipulation and Recommendation in Case No. 08-1094-EL-SSO et al states at page 4: "The rider will initially be established at 1.97 cents per kWh, which amount will be subtracted from DP&L's residual generation rates."
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- a. Why are the Fuel Rider rates implemented by DP&L in January 1, 2010 different from the 1.97 cents per kWh? Identify and explain the reasons.
- b. Please show in detail how the 1.97 cents per kWh was calculated, including the dollar amounts used for each account that was included.
- c. Did DP&L present any calculations in Case Nos. 08-1094-EL-SSO et al showing how the fuel rider rate was to be calculated and/or which accounts and costs were to be included? If not, explain fully why not. If so, please identify and provide that information.
- Onsite 45. Please provide the Excel files for the optimization calculations A through J that were provided in LA-2010-44 in PDF.
- Onsite 46. Please provide Excel files for booking the optimizations monthly. Please provide this for Optimizations for Optimization (and any others if others had a year-end true-up or reconciliation).
- Onsite 47. Please provide the Excel files for the Spring 2011 Fuel Rider filing. (This is the one that includes the September-November 2010 actuals.)
- Onsite 48. Please provide details and files needed to reconcile September and November 2010 DP&L Retail Expenses as follows and to understand how any corrections related to such differences have been/are being reflected in the Fuel Rider filings:
 - a. September 2010 DP&L Retail Expenses \$18,898,823 from Onsite 10 and \$18,999,542 as-filed.
 - b. November 2010 DP&L Retail Expenses \$17,779,282 from Onsite 10 and \$17,595,994 as-filed.
- Onsite 49. For each optimization deal component which does not already show the "Original Purchase Price" information, please provide such original purchase price information. This would be similar to Excel line 23 on the "Final" tab for optimizations A and I, which do show such information.
- Onsite 50. For optimization F, please provide explanations for the aspects of the transaction discussed during the 3/28/2011 call,

per

Excel line 43 on "Final" tab).

- Onsite 51. To the extent that the postings of the final adjustments to the 10 optimizations described in Onsite 46 for Optimization **Excellent**, are not yet reflected on the December 2010 Excel file from Accounting (**Excellent**), please provide a December 2010 Excel file from Accounting which reflects such postings.
- Onsite 52. We have made a search of documents filed in Case No. 08-1094-EI-SSO and conclude that FERC Accounts 403 and 512 were not among the accounts to be included in the fuel deferral mechanism; however, we want to make sure we

have not overlooked some information of which the Company is aware but hasn't yet specifically disclosed. We note that DP&L witness Greg Campbell's testimony in Case No. 08-1094-El-SSO at pages 3-5 mentions FERC Accounts 501 (other than labor associated with fuel purchasing and the removal and disposal of fly ash), 502 (other than water analysis and operation of the NPDES equipment), 509, 547, 555, 411.8 and 411.9 as being the includable accounts and states that DP&L would only defer the excess of the retail jurisdictional share of those accounts.

- Please confirm that no testimony, briefs or other documents filed or disclosures made by Dayton Power & Light in Case No. 08-1094-El-SSO et al mentioning FERC Accounts 403 and 512 as being among the accounts included in the fuel cost deferral mechanism.
- b. If the Company believes these two accounts (Accounts 403 and 512) were addressed as being includable in the fuel cost deferral mechanism somewhere in Case No. 08-1094-El-SSO et al, please provide specific citations to the specific documents, pages, line numbers, etc.
- Onsite 53. Please confirm that the table shown below accurately reconciles each item comprising the \$40,186 "final true-up amount" mentioned in the response to Onsite 51 (Excel file showing the reconciliation is also attached):



If any components of this reconciliation are believed to not be totally accurate, please provide a revised reconciliation for the \$40,186 amount.

Onsite 54. Please confirm that DP&L's reflection of the provide optimization adjustment in December 2010 on tab 7 has caused an overstatement of DPL Fuel Rider costs for 2010 of approximately provide as shown in the table below (our Excel calculations, also attached, show an overstatement provide as 0.6281 versus reflecting the correction impacts in each month of 2010 when the DPL Retail Ratios were different. If this is not correct, please explain fully why and provide correct information.



Onsite 55. Please confirm that DP&L's reflection of the distance adjustment for Optimization A in December 2010 on tab 7 has caused an overstatement of DPL Fuel Rider costs for 2010 of approximately \$ (our attached Excel calculations show an overstatement of \$) by posting the distance credit related to Optimization A as an adjustment in December when the DPL Retail Ratio was 0.6281 versus reflecting the correction impacts in each month of 2010 when the DPL Retail Ratios were different. If this is not correct, please explain fully why and provide correct information.

Onsite 56.	Please provide the	
Onsite 57.	Please provide memo documenting	
Onsite 58.	Please provide memo documenting decision	
Onsite 59.	Please provide an explanation for the decision	

ATTACHMENT II

Coal Regions

There are six major coal basins for coal used in power production.

- 43. Northern Appalachia (NAPP)
- 44. Central Appalachia (CAPP)
- 45. Southern Appalachia (SAPP)
- 46. Illinois Basin (ILLB)
- 47. Powder River Basin (PRB)
- 48. Rockies

Figure 0-1 U.S. Coal Basins

