ORDER

On February 20, 2014, Southwestern Electric Power Company ("SWEPCO" or "Company") filed with the Arkansas Public Service Commission ("Commission") an Application to request approval of amendments to its Energy Cost Recovery Rider ("Rider ECR"). On that date, SWEPCO also filed the Direct Testimony and Exhibits of Teresa J. Kraske and the Direct Testimony and Exhibits of Paul W. Franklin. On March 7, 2014, the Attorney General of Arkansas (the "AG") submitted notice of intent to be an active party in this docket. On March 12, the General Staff of the Commission ("Staff") filed the Direct Testimony and Exhibits of Regina L. Butler.

Positions of the Parties

Ms. Kraske testifies that SWEPCO seeks approval of amendments to its Rider ECR to allow recovery of the cost of chemicals consumed by environmental controls installed, or to be installed, on various SWEPCO generating units, in order to comply with air quality regulations adopted by the United States Environmental Protection Agency ("EPA"). Kraske Direct at 4. Ms. Kraske also describes the requested revisions to Rider ECR and forecasts their cost impact on the rider. Id.

Mr. Franklin describes in general terms the types of environmental controls to be installed on SWEPCO's coal and lignite-fired generating fleet, and the chemicals
generally consumed by those controls. Franklin Direct at 4-5. He also describes chemicals currently being consumed by SWEPCO's generating facilities that are not currently being recovered through Rider ECR. Id. at 5.

Mr. Franklin summarizes SWEPCO's existing coal-fired generation fleet as follows: The Welsh Power Plant near Cason, Texas has three 528 MW units (totaling 1,584 MW) which burn Powder River Basin ("PRB") coal. Id. The units were placed in service in 1977, 1980, and 1982, respectively, and operate as base load and support load following. Id. The single-unit, 528 MW Flint Creek Power Plant near Gentry, Arkansas, uses PRB coal from the same mines that supply Welsh, and uses diesel fuel for ignition and flame stabilization. Id. at 6. It was placed in service in 1978 and is half-owned by Arkansas Electric Cooperative Corporation ("AECC"). Id.

Mr. Franklin summarizes SWEPCO's existing lignite-fired generation fleet as follows: the Henry W. Pirkey Power Plant ("Pirkey"), near Hallsville, TX is a single-unit, 675 MW, base load plant that began operation in 1985. Id. SWEPCO owns 580 MW of the unit and the remainder is jointly owned by Oklahoma Municipal Power Authority ("OMPA") and Northeast Texas Electric Cooperative ("NTEC"). Id. Pirkey uses lignite from reserves owned by SWEPCO at an adjacent mine, and uses natural gas for ignition and flame stabilization. Id. Pirkey was SWEPCO's first unit to have a Flue Gas Desulfurization ("FGD") system. Id. The Dolet Hills Power Plant ("Dolet Hills"), near Mansfield, Louisiana, is a single-unit, base load plant that began operation in 1986, and is jointly owned with Central Louisiana Electric Cooperative (CLECO), NTEC, and OMPA. Id. at 6-7. SWEPCO owns 262 MW of the 650 MW plant. Id. at 6 and 7. CLECO operates and maintains the plant, which uses lignite adjacent to the plant, from
reserves jointly owned by the plant owners. Id. at 6-7. Dolet Hills uses natural gas for ignition and flame stabilization and has an FGD system to control sulfur dioxide (SO2) emissions. Id. at 7.

Mr. Franklin testifies that EPA’s Mercury and Air Toxics Standards Rule (“MATS”), Regional Haze Rule (“RHR”) and Cross State Air Pollution Rule (“CSAPR”) are the three primary regulations that have led SWEPCO to decide to install environmental controls at Welsh, Flint Creek, Dolet Hills, and Pirkey. Id. at 7. Mr. Franklin explains that MATS regulates coal- and oil-fired electric generator emissions of hazardous air pollutants (“HAPS”), including mercury, non-mercury metals, acid gases, and many organic HAPs. Id. at 7-8.

The RHR, according to Mr. Franklin, requires states to develop enforceable regional haze state implementation plans to reduce pollutants that impair visibility. Id. at 8. Mr. Franklin states that the Arkansas Department of Environmental Quality (“ADEQ”) has determined that Flint Creek is impacted by its RHR plan, and that compliance will be required within five years, or as soon as practicable, once the plan is approved by EPA. Id.

Mr. Franklin further explains that EPA issued CSAPR in 2011 in order to replace the earlier Clean Air Interstate Rule (“CAIR”). Id. at 9. CSAPR reduces NOx and SO2 emissions to address downwind ozone and PM 2.5 nonattainment areas. Id. Mr. Franklin notes that CSAPR was stayed by the D.C. Circuit Court in late 2011 and that CAIR remains in effect while CSAPR is reviewed by the U. S. Supreme Court. Id. EPA has announced that it will propose another version of CSAPR in mid-2014 that addresses only downwind ozone areas, according to Mr. Franklin. Id.
Mr. Franklin states that, while Dolet Hills and Pirkey currently have FGD technology, and Dolet Hills has a selective non-catalytic reduction ("SNCR") system, SWEPCO plans to install additional environmental controls at all four plants (Dolet Hills, Pirkey, Welsh Units 1 and 3, and Flint Creek). *Id.*

At Dolet Hills, Mr. Franklin testifies that SWEPCO will install, by April 2014, a Dry Sorbent Injection System ("DSI"), an Activated Carbon Injection System ("ACI"), and a baghouse, in order to comply with MATS, which goes into effect on April 15, 2015. *Id.* at 9-10. He states that SWEPCO also will install new, larger Induced Draft ("ID") fans necessitated by the baghouse. *Id.* at 10. The DSI system will use hydrated lime to control hydrochloric acid emissions and the ACI system will use activated carbon to control mercury emissions. *Id.* The baghouse will reduce filterable particulates and increase the effectiveness of the ACI system, thereby reducing the use of activated carbon. *Id.* Also, according to Mr. Franklin, SWEPCO placed SNCR technology in-service in March 2013 that uses urea to control NOx emissions in order to comply with CSAPR. *Id.*

At Pirkey, Mr. Franklin testifies that an ACI system should be in service by April 2015 for MATS compliance. *Id.* He states that, in addition to activated carbon, Pirkey's ACI system will use calcium bromide to maximize removal of mercury emissions. *Id.*

At Flint Creek, Mr. Franklin testifies that an ACI system and an FGD system with an integrated baghouse are expected to be in service by June 2016. *Id.* These systems will consume activated carbon to mitigate mercury emissions and hydrated lime to mitigate SO2 emissions. *Id.* at 10-11.
At Welsh Units 1 and 3, Mr. Franklin testifies that an ACI system with a baghouse will be installed on Units 1 and 3 by April 2016 and December 2015, respectively, in order to comply with MATS. *Id.* at 11. He states that the ACI system will use activated carbon to control mercury emissions and that the baghouse will enhance its performance. *Id.*

Mr. Franklin provides confidential, estimated costs for each chemical related to these new environmental controls, but notes that chemical costs will fluctuate with the market and that the quantities consumed will vary directly with energy production at the plants. *Id.* Also, Mr. Franklin describes the following chemicals currently in use at its generating plants:

- **Dolet Hills:** limestone, anhydrous ammonia, molten sulfur;
- **Pirkey:** limestone, emulsified sulfur, dibasic acid, anhydrous ammonia, molten sulfur;
- **J. Lamar Stall:** aqueous ammonia (Stall is a natural gas combined cycle plant).

*Id.* at 11-12. Mr. Franklin indicates that, at Dolet Hills, the use of anhydrous ammonia and molten sulfur will be phased out once the baghouse is in place. *Id.*

Mr. Franklin states that SWEPCO currently recovers the cost of limestone at Dolet Hills and Pirkey through Rider ECR, but that the emulsified sulfur, bidasic acid, anhydrous ammonia and molten sulfur at these plants is recovered through base rates. *Id.* at 12. SWEPCO recovers the cost of aqueous ammonia consumed at the Stall Plant through the Alternative Generation Recovery Rider, according to Mr. Franklin. *Id.* Mr. Franklin explains that CLECO and SWEPCO reasonably installed SNCR at Dolet Hills
prior to finalization of the CSAPR rule because, despite uncertainty with regard to CSAPR, other regulations, such as revisions to ozone and particulate standards, may require reduced NOx emissions. *Id.* at 12-13. Mr. Franklin states further that SWEPCO agreed with CLECO’s determination that compliance with MATS, CSAPR and other EPA regulations would create manpower and equipment shortages, and that it would therefore be economically prudent to proceed with the purchase and installation of the emissions control equipment. *Id.* at 13.

Ms. Kraske states in summary that SWEPCO proposes to recover in Rider ECR the costs of activated carbon, calcium bromide, hydrated lime, and urea. Kraske Direct at 5. Ms. Kraske indicates that recovery of these costs is reasonable because EPA regulations require SWEPCO to install environmental control equipment for continued operation of its coal and lignite-fired generating fleet. *Id.* She notes that, while Mr. Franklin estimates the cost of the chemicals, the costs will be beyond SWEPCO’s control, varying with the amount of energy generated by the coal and lignite plants and the market price of the chemicals. *Id.* This uncertainty makes it appropriate to recover these costs by rider, with an annual true-up and adjustment of fuel factors, according to Ms. Kraske. *Id.* at 5-6. Ms. Kraske notes that SWEPCO already recovers similar costs for limestone and for emissions credits for SO2 and NOx through Rider ECR. *Id.* at 6. Also, she notes, Order No. 21 in Docket No. 13-028-U authorized Entergy Arkansas, Inc. ("EAI") to recover the cost of activated carbon and calcium bromide necessary for MATS compliance through EAI’s Rider ECR. *Id.*

Ms. Kraske proposes amendments to SWEPCO’s Rider ECR to accomplish recovery of additional pollution control chemicals that are reflected in a redlined mark-
up. *Id.* at 6 and Exhibit TJK-1. She estimates that these amendments would increase the Arkansas Rider ECR by 0.22% for the April 2014 through March 2015 time period. *Id.* at 7 and Confidential Exhibit TJK-2.

Ms. Butler summarizes the elements and timing of SWEPCO’s proposed projects and acknowledges SWEPCO’s cost estimates, tariff revisions, and estimated rate impacts for environmental chemicals. Butler Direct at 3-5. Ms. Butler testifies that the proposed tariff revisions properly allow for recovery of chemical costs. *Id.* at 6.

Ms. Butler notes, however, that the anhydrous ammonia and molten sulfur which are currently in use at Dolet Hills, and the costs of which currently are recovered in base rates, will no longer be required once a new baghouse is in service. *Id.* Ms. Butler states that SWEPCO should only be allowed to recover the incremental cost of chemicals required due to the installation of new environmental controls, and that the cost of anhydrous ammonia and molten sulfur for Dolet Hills should be reflected as an offset to the chemical costs SWEPCO proposes to recover in Rider ECR. *Id.* Ms. Butler thus recommends amended tariff language providing that the incremental chemical costs will be adjusted to remove chemical costs embedded in base rates, and that are no longer required. *Id.* Ms. Butler recommends an adjustment of approximately $19,353 to account for these reduced costs, which is based on a response to Staff’s Data Request for these costs. *Id.* at 6 and Exhibit RLB-1.

Ms. Butler notes that the Commission has approved the recovery of other costs related to environmental controls through fuel adjustment clauses, including recovery of SO2 emission allowances for Entergy Arkansas, Inc. (“EAI”); limestone expense for SWEPCO; allowances for SO2 and NOx for EAI; and Air Quality Control System
expenses, including ammonia, lime and limestone, and powder activated carbon, and revenues and expenses related to SO2 and NOx allowances for the Empire District Electric Company ("Empire"). *Id.* at 7, *citing* Docket Nos. 06-101-U, 09-008-U, 09-093-U, and 10-052-U. Ms. Butler notes that the Commission recently approved recovery of calcium bromide and activated carbon costs in the Rider ECR for EAI. *Id.*, *citing* Docket No. 13-028-U. Ms. Butler recommends that SWEPCO be allowed to recover expenses for chemicals required in operation of environmental controls equipment through Rider ECR provided that such expenses are offset by $19,353 for the level of expenses for anhydrous ammonia and molten sulfur currently recovered in base rates that is no longer required and that SWEPCO be required to revise the proposed tariff language to reflect this offset to the incremental chemical costs. *Id.* at 7-8.

**Findings and Rulings**

Based upon the testimony and exhibits provided by SWEPCO's witnesses Mr. Franklin and Ms. Kraske, describing the general costs of environmental chemicals and the energy-dependent nature of environmental chemical consumption, and based upon the recommendation of Staff witness Ms. Butler, the Commission approves the Application, provided, however, that approval of the Application does not constitute pre-approval of, or a determination of the prudence of, any particular environmental controls project. No charges for environmental chemicals may be passed through the rider to customers unless the Commission has approved the prudence of the particular environmental controls project at issue or the Commission has otherwise approved the recovery of the costs for such a project in retail rates. It is not the purpose of this proceeding regarding chemical costs, which are ordinarily only a portion of the variable
costs of what may be a larger environmental project, to approve or disapprove any particular environmental controls project, nor has substantial evidence been provided in support of any particular project. The ruling herein approves the Company's request to use its ECR to recover costs of environmental chemicals for approved projects, while preserving the Commission's ability to protect ratepayers by considering individual projects and specific costs on a case-by-case basis.

BY ORDER OF THE COMMISSION,

This 20th day of March, 2014.

Colette D. Honorable, Chairman

Olan W. Reeves, Commissioner

Elana C. Wills, Commissioner

I hereby certify that this order, issued by the Arkansas Public Service Commission, has been served on all parties of record on this date by the following method:

____ U.S. mail with postage prepaid using the mailing address of each party as indicated in the official docket file, or

X Electronic mail using the email address of each party as indicated in the official docket file.

Sandra Robertson (acting)
Acting Secretary of the Commission