DOCKET NO. E-22, SUB 562
DOCKET NO. E-22, SUB 566

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. E-22, SUB 562 In the Matter of Application of Virginia Electric and Power Company, d/b/a Dominion Energy, for Adjustment of Rates and Charges Applicable to Electric Service in North Carolina DOCKET NO. E-22, SUB 566 In the Matter of Petition of Virginia Electric and Power Company, d/b/a Dominion Energy North Carolina for an Accounting Order to Defer Certain Capital and Operating Costs Associated with Greensville County Combined Cycle Addition	)	PUBLIC STAFF MOTION FOR CLARIFICATION AND RECONSIDERATION

NOW COMES THE PUBLIC STAFF – North Carolina Utilities Commission (Public Staff), by and through its Executive Director, Christopher J. Ayers, and respectfully moves for clarification and reconsideration of the February 24, 2020, "Order Accepting Public Staff Stipulation in Part, Accepting CIGFUR Stipulation, Deciding Contested Issues, and Granting Partial Rate Increase" (Order) for the reasons noted below.

1. The Order determined that one – but not the only – reason for denying a return on the unamortized balance of deferred coal ash costs is that Virginia Electric and Power Company, d/b/a Dominion Energy (DENC or

Company), failed to collect decommissioning costs for coal ash[1] disposal facilities. The Commission noted that consistent with the matching principle, the costs of removal or closure for ash impoundments (and other CCR disposal sites) should be estimated as part of the terminal net salvage value of the coal plants, and should be charged as a "cost of removal" (or "decommissioning cost") expense in rates, similar to or as a component of depreciation expense, during the timeframe that the ash is being created. This accounting approach would mean the costs would have been paid by the customers who were benefiting from the associated electric service. (See Attachment 1 for the relevant part of the Order.) Because Dominion had not collected a cost of removal in past rates to pay for closure of coal ash sites, the amount requested by the Company for rates to present customers for coal ash remediation and site closure is higher than it otherwise would have been. This was one of the reasons why the Commission decided that there should be an adjustment to the rate request – namely, a denial of return on the unamortized balance of deferred coal ash costs – to achieve just and reasonable rates. In particular, the Order states:

> In the end, the Commission concludes that the balancing that will be achieved by a ten-year amortization of DENC's CCR costs without a return is further supported by the failure of DENC to properly account for the full decommissioning costs of its coal-fired power plants and to collect its best reasonable estimate of those costs as part of depreciation allowance, adjusted from time to time as new information was acquired.

[1] "Coal ash" and "CCR" are used herein to mean Coal Combustion Residuals, which are the by-products of burning coal to generate electricity.

2. The Order also states:

> In addition, the Commission finds good cause to direct that in DENC's next update of its depreciation study it should account for its projected CCR remediation and closure costs in the decommissioning expenses for its coal-fired power plants.

Ordering paragraph 24 says the same thing. Additionally, the Order does not provide for deferral of future coal ash costs to be incurred by DENC; the Public Staff supports deferral of ARO coal ash remediation and closure costs on the basis of their extraordinary nature and expected magnitude and impact on earnings. The instant Motion seeks clarification of the part of the Order that requires projected CCR remediation and closure costs to be accounted for in decommissioning expenses instead of being deferred to a regulatory asset.

3. The Public Staff understands that because coal ash corrective action and closure costs are now mandated by law, they are subject to Asset Retirement Obligation (ARO) accounting standards under Generally Accepted Accounting Principles (GAAP) and the Federal Energy Regulatory Commission's (FERC) Uniform System of Accounts (USOA). ARO accounting standards provide for the recognition of ARO coal ash costs as expenses over the life of the underlying electric generation plants, for GAAP and USOA financial reporting purposes. Hence, at the time ARO accounting for coal ash costs was adopted, any such costs related to prior accounting periods would have been required to have been written off to expenses immediately, had not the Commission approved deferral of those costs to a regulatory asset. (See the Duke Energy Progress, LLC (DEP), and Duke Energy Carolinas, LLC (DEC), Petition for an Accounting Order in Docket Nos. E-2, Sub 1103, and E-7, Sub 1110.) In fact, in its treatment of coal ash costs for

ratemaking purposes in the most recent DEP and DEC general rate cases, as well as in the present proceeding, the Commission has departed even further from the GAAP/USOA expense recognition approach, allowing the utilities to defer all coal ash costs as expended, whether related to service provided in prior or future periods, and recover them as an amortization of the deferred regulatory asset over a discrete period of time. Thus, the Commission has allowed deferral of not only the costs that were immediately written off as expenses upon adoption of GAAP/USOA ARO accounting, but also, at least to a certain extent, the depreciation-like expenses already recognized and to be recognized in years subsequent to adoption of the GAAP/USOA approach. If allowed to continue until all expenditures were made, the approach approved by the Commission would provide for the deferral of all expenses that would be recorded under the GAAP/USOA approach, with recovery of those expenses achieved over amortization periods approved in various rate cases[2].

4. A purpose of deferral is to provide for rate recovery in future periods of expenses related to prior periods that are found to not be presumptively recovered in rates existing at the time the expenses would normally be recognized for regulatory accounting and ratemaking purposes, and thus to allow the Company to avoid non-recovery of those expenses, and the associated significant adverse impact on earnings and return on equity. Approving past expenses for

[2] For purposes of this Motion, "expenditures" refers to cash as it is paid for incurred costs; "expenses" refers to those costs as they are recognized as reductions to net income in the financial statements under applicable sets of accounting principles (E.g., GAAP, FERC USOA, or those established by the Commission). Recognition of expenditures as expenses often occurs at a different time than when the expenditures occur.

deferral is a departure from normal ratemaking practice, pursuant to which they are deemed to have been recovered through the rates in effect at the time that the expenses would have normally been recognized pursuant to, as applicable, GAAP, the FERC USOA, or the Commission's own established regulatory accounting and ratemaking principles. Another purpose is to allow the Company to avoid recognizing a loss due to those expenses, even if temporary, on its financial statements. The Commission did approve deferral of coal ash-related ARO costs for DENC, as well as DEP and DEC, in past cases.

5. The Public Staff seeks clarification and/or reconsideration regarding the Commission's directive to recover future CCR expenditures through revised depreciation rates. The situation prompts the following questions for which the Public Staff seeks clarification and/or reconsideration:

a. Does the Commission intend the depreciation method to be used only for CCR costs associated with ash produced in the future, and thus inherently related to future operations? If so, does the Commission intend for future CCR expenditures associated with past operations to be recovered through the method approved in this proceeding for historic CCR expenditures?

b. Does the Commission instead intend the full amount of future CCR expenditures to be recovered through the depreciation method going forward, whether or not related to ash produced in the future?

c. Does the Commission intend that recovery of CCR costs through revised depreciation rates include a sharing or balancing of those costs between ratepayers and shareholders?

Clarification on these questions is important to correctly implementing the Commission's Order. While the Commission's order can be theoretically implemented using either of the approaches listed in a. or b. above (subject to any limitations that might arise with regard to dividing expenditures between those related to past and future ash creation), both approaches raise questions regarding one or more of the following: (1) the length of the depreciation period, (b) intergenerational equity, and (c) sharing or balancing the costs.

6. DENC can adjust depreciation rates for individual plants to recover ongoing CCR costs. Alternatively, DENC could accomplish the same objective using a separate cost of removal, or decommissioning, rate for individual plant CCR costs. This methodology is fairly straightforward to the extent it applies to costs associated with ash produced in the future as there will be plant with useful life over which the depreciation expense can be spread. However, if the methodology applies to all future coal ash expenditures, even those related to ash produced in the past, to the extent a plant will be retired in the near future, there will be little time to depreciate closure costs over the remaining life of the plant. To the extent a plant is already retired, there is no useful life over which to depreciate the closure costs. In either of these two instances, an alternative means of

recovering ongoing CCR costs would most likely be required, due to the magnitude of costs involved and the short (or nonexistent) depreciable life available.

7. None of the options discussed above provide a means to fully address intergenerational equity, which underlay the reasoning in the Commission's Order. If the full amount of future coal ash expenditures are to be recovered as part of future depreciation expense, the intergenerational equity issue discussed in the Order will remain. It would appear that present and future customers would pay for coal ash remediation with respect to a by-product that largely benefited past – not present – customers. The possibility of this intergenerational mismatch would be mitigated if the intent of the Order was to require only the remediation and disposal cost of coal ash actually produced in the future to be recovered as part of depreciation expense. Such an approach would allow recovery of CCR costs related to the cleanup of existing ash through deferral and amortization, where the Commission can apply sharing or balancing as in the Order.

8. If the full amount of future coal ash expenditures are to be recovered as part of future depreciation expense, any sharing or balancing of those particular costs between ratepayers and shareholders would be difficult, if not impossible, to achieve. If those costs are included in depreciation expense built into future rates, there would be no return to deny in order to achieve sharing, and thus 100% of the costs would be borne by ratepayers.

9. To the extent the Commission's Order eliminates or precludes sharing or balancing CCR costs between shareholders and ratepayers, the Public

Staff respectfully requests that the Commission reconsider its decision. The Public Staff continues to support denial of a return on the grounds that (1) the deferred coal ash costs are extraordinary in magnitude and nature (the very reasons for granting a deferral); (2) those expenditures do not result in any new electric service to customers (which is related to but not the same as intergenerational equity concerns); and (3) the Company has contaminated groundwater with its coal ash management – a negative environmental consequence for which it would be unjust and unreasonable to place the cost responsibility entirely on customers. The Public Staff has thoroughly articulated its rationale for cost-sharing in its testimony and proposed order and will refrain from reiterating that discussion here. The Public Staff believes that the same conditions that warrant balancing and sharing will persist and that the Commission's Order should allow for continued balancing and sharing going forward rather than preclude at this time any future consideration of sharing or balancing.

10. The foregoing questions and request for clarification do not mean the Public Staff takes exception to the part of the Order that denies a return on the unamortized balance of deferred coal ash costs or the reasons underlying the balancing crafted by the Commission. There are multiple reasons for denying a return pursuant to N.C. Gen. Stat. 62-133(d) to achieve just and reasonable rates, and the Commission's reasoning with respect to intergenerational concerns is not inconsistent with the Public Staff's overall rationale.

WHEREFORE, the Public Staff respectfully requests that the Commission provide clarification on the matters discussed above.

Respectfully submitted this 24th day of April, 2020.

PUBLIC STAFF
Christopher J. Ayers
Executive Director

Electronically submitted
/s/ David T. Drooz
Chief Counsel

4326 Mail Service Center
Raleigh, North Carolina 27699-4300
Telephone: (919) 733-6110
Email: david.drooz@psncuc.nc.gov

CERTIFICATE OF SERVICE

I certify that I have served a copy of the foregoing Public Staff Motion for Clarification on all parties of record in accordance with Commission Rule R1-39, by United States mail, postage prepaid, first class; by hand delivery; or by means of electronic delivery upon agreement of the receiving party.

This the 24th day of April, 2020.

Electronically submitted
/s/ David T. Drooz

From page 132 of the Order:

A number of material facts in evidence call into question the prudence of DENC's actions and inaction and the risks accepted by DENC management at several of its CCR sites. For example, see the discussion of the Possum Point CCR site supra, and the pertinent portions of the industry and government documents previously discussed, such as the 1982 *EPRI Manual for Upgrading Existing Disposal Facilities* and the 1988 EPA Report to Congress entitled *Wastes from the Combustion of Coal by Electric Utility Power Plants*. Moreover, as was the case in the context of the MGP cases and the cancelled nuclear plant cases, the total costs incurred is significant (approximately $377 million on a system level approximately $22 million on a North Carolina retail level), which amounts to approximately $179 per North Carolina retail customer, or $60 per year per North Carolina retail customer, assuming the unamortized balance is not included in rate base. Additionally, allocating all of the CCR Costs to ratepayers violates the matching principle and raises intergenerational equity concerns. DENC's CCR Costs address many decades' worth of coal-ash waste and the closure of coal ash basins related to electric service provided to customers in the past. Tr. vol. 5, 85-88. In fact, most of DENC's expenditures relate to generating stations that have been retired or converted to natural gas and the ash ponds have been retired for years or decades. *Id.*; Late Filed Exhibit 5 MDM-1. Thus, DENC's present and future ratepayers are being burdened with costs arising from past service. Therefore, as it is so required by N.C.G.S. § 62-133(d), the Commission considers these material facts of record when striking the appropriate balance between shareholder and customer interests to set just and reasonable rates. *State ex rel. Utils. Comm'n. v. Thornburg*, 314 N.C. 509, 511, 334 S.E.2d 772, 773 (1985) (concluding that "[i]n setting rates, the Commission must consider not only those specific indicia of a utility's economic status set out in N.C.G.S. § 62-133(b) but also all other material facts of record, which may have a significant bearing on the determination in the case.").

From pages 137-44 of the Order (the Evidence and Conclusions for Findings of Fact Nos. 56-58):

The evidence supporting these findings of fact and conclusions is contained in DENC Late-Filed Exhibits 3 and 5, DENC's 2011 and 2016 depreciation studies, and the records of DENC's last three general rate cases, Docket Nos. E-22, Subs 459, 479, and 532.

As previously discussed, one of the fundamentals of cost-based ratemaking as it has developed in this state is that the full cost of providing utility service should be recovered, as near as may be possible, from rates in effect in the period in which service is provided. One objective of this useful and important "matching principle" is to encourage customers to make efficient and cost-effective use of utility services by enabling them to see and appreciate the full cost of the service provided, even when some of the expenditures required to provide the service may be incurred or made by the utility at some time either before or after the service is actually consumed. A companion objective is to avoid cost-shifting and subsidies among different generations of customers who consume service during different time periods. Achieving these objectives is complicated by the fact that many expenditures by a utility company, especially construction of capital intensive facilities to generate, transmit and distribute electricity, are lumpy; that is, a large expenditure may be made in a very short period of time, but the investment thus made will enable the utility to provide service to customers over many years. The well-accepted method for smoothing out this lumpiness and enabling the costs of large scale capital investments to be recovered from all generations of customers who will benefit from and receive service from those facilities is by allowing the utility to include in its rates a regular periodic allowance for use and consumption of the investment, i.e., an allowance for depreciation. Through depreciation allowance, recovery of the costs of making a large investment are spread over many ratepayers, rather than being borne only by that group of ratepayers taking service during the time the expenditure is actually made.

In the usual case costs associated with the retirement or decommissioning of a long-lived asset are, in accord with the matching principle, included as part of the periodic allowance for depreciation that is related to that asset. This marks a recognition of the fact that while significant costs are incurred to construct or to acquire an asset, it may also be that significant costs will be incurred when the asset reaches the end of its useful life, including such things as costs to dismantle, decommission, remove, secure, or dispose of the asset. Failure to anticipate these end-of-life costs and make provision for them in the periodic allowance for depreciation distorts the true cost of providing service to those customers who take service during the asset's useful life and shifts a portion of those costs to the unlucky customers who happen to take service at a time when the asset is retired. *Generally see*, *State ex rel. Utilities Commission v. Edmisten*, 291 N.C. 451, 232 S.E.2d 184 (1977) (*Edmisten III*). Such is the case here with respect to the costs of closing waste coal ash management units when they are no longer receiving ash. These end-of-life costs are referred to as either "interim" or "terminal" net salvage values and for purposes of depreciation they are treated the same as the initial cost to acquire or construct the asset. They may be positive, if the asset is expected to yield a positive return when it is retired, or they may be negative, if the cost of decommissioning the asset is expected to exceed any value from salvage.

In the present case, however, the Company's request to include in its present and future rates the costs of final handling and disposal of CCRs produced from the burning of coal over many decades is a departure from the matching principle. In response to a question from the Commission, the Company reported that it had not included in its allowances for depreciation any amount toward the costs now being incurred to close the waste ash management units at its coal-fired generating plants. DENC Late-Filed Exhibit No. 3. The Company stated:

> This is appropriate as the Company has not yet identified the nature and timing of such [closure] activities and therefore the projected costs have not been reasonably known and measurable. This treatment is assessed by the Company's accountants, depreciation consultant and generation management as part of preparing each depreciation study.

It is clear from the Company's response and from the record of this case and the Company's prior rate cases that at no time prior to the present rate case – not as part of its depreciation studies prepared in 2011, or in 2016, and not as part of its general rate case applications filed in 2009, 2012 and 2016 – has the Company sought to recover in its rates any amount for costs of final closure of its waste ash management facilities. *See* Docket Nos. E-22, Subs 459 and 479 (updated 2011 depreciation study filed in Docket No. E-22, Sub 493 on April 1, 2013); and Sub 532 (updated 2016 depreciation study filed in Docket No. E-22, Sub 562 on August 21, 2019). The Company's explanation of its failure to consider or include costs of closure for waste coal ash facilities in calculating an allowance for depreciation is not persuasive for a number of reasons.

Industry understanding of the need to anticipate significant costs for final closure of waste coal ash management facilities is not something that developed only recently. On this topic Company witness Williams acknowledged that he was familiar with the 2004 report prepared by EPRI titled "Decommissioning Handbook for Coal-Fired Power Plants" (Decommissioning Manual). Tr. vol. 10, Official Exhibits, DEC Rate Case, Docket No. E-7, Sub 1146, AGO McManeus Cross-Exam Exh. 2, at 699-782. However, he dismissed the report as merely a series of case studies, ignoring the report's general findings and conclusions, including this clear and unambiguous admonition:

> [C]losure of most surface impoundments will require drainage, placement of an impermeable cap, and topping with soil and a vegetative cover. . . . The caps for the impoundments will require continued maintenance to maintain the site contours, vegetative cover and drainage. Some impoundments will require the installation and monitoring of groundwater wells. The waste in other surface impoundments may be excavated for disposal offsite, and the impoundment backfilled with clean material.

Id. at 724.

Discussing the various tasks and costs that could be expected as part of the retirement of a plant, the manual later observed that "[c]losure of surface impoundments and landfills probably will be the most expensive tasks undertaken during a decommissioning project." *Id.* at 722. Nothing in the 2004 EPRI Decommissioning Manual is presented as novel, unexpected, groundbreaking, or beyond the scope of sound industry practice as it was understood in 2004. It is notable that this report precedes by more than a decade the adoption of the CCR Rule and was issued several years before the EPA commenced rulemaking on the subject of disposal of coal ash wastes. The case studies presented in the report make clear that the costs of closure of coal ash disposal facilities could likely range well into the tens of millions of dollars.

We know now that the costs that DENC is likely to incur will greatly exceed even the amounts revealed in the 2004 case studies reviewed in the EPRI Decommissioning Manual, and the Company apparently believes that the difficulty in making precise estimates of final closure costs absolves it of responsibility for making the effort to do so at all. This is not acceptable. As the Company itself noted in its response to the Commission's question, depreciation studies and requested allowances for depreciation are periodically reviewed and updated to include the latest information and to make adjustments where necessary in light of such new information. This was precisely the purpose of the Company's regular review and updating of its depreciation studies in 2006, 2011 and 2016. Further, this is quite similar to the requirement for establishing an Asset Retirement Obligation (ARO) when the Company has a known but not perfectly quantifiable risk associated with future retirement of a long-life asset. *See* Order Allowing Utilization of Certain Accounts, *Request by Virginia Electric and Power Company, d/b/a Dominion North Carolina Power*, No. E-22, Sub 420 (N.C.U.C. Aug. 6, 2004) (approving DENC's use of ARO accounting for certain long-life assets in compliance with Statement of Financial Accounting Standards No. 143).

This is not a case where the Company simply made inaccurate projections of the necessary allowance for net salvage to be included in depreciation allowance; instead, with respect to that portion of net salvage value attributable to the costs of remediating and closing coal ash waste management facilities it failed to engage in the exercise at all.

Recovery of net salvage in depreciation, including costs of removal, decommissioning, and closure, has been endorsed by the Commission, and the Company cannot complain that there has been no regulatory guidance on the subject.

Pertinent here is the Commission's decision in Order Granting Partial Rate Increase, *Application by Aqua North Carolina, Inc., for Authority to Increase Rates for Water and Sewer Utility Service in All of Its Service Areas in North Carolina*, No. W-218, Sub 319 (N.C.U.C. Nov. 3, 2011) (Aqua Order). In that proceeding, Aqua and the Public Staff disagreed as to the propriety of including in depreciation expense, and thus in rates, amounts for terminal net salvage value that would reflect and incorporate costs of removal. The Company's witnesses pointed out that including these amounts in current depreciation expense would properly assign a portion of expected future expenses to those customers who were currently receiving the benefit of the utility plant while it was still in service. The Public Staff contended that such a practice would improperly require present customers to pay for future costs that might or might not actually be incurred or might be different in amount at the time actually incurred. As to this difference of opinion, the Commission noted the applicant's testimony in the following summary:

> Witness Spanos advocated utilizing the net salvage percentage for depreciation accrual rates consistently with the new practice of recording the cost of removal as the most appropriate methodology. Therefore, according to witness Spanos, the cost of removal for each project will be charged to accumulated depreciation at the same time the Company accrues for the net salvage value in rates. Witness Spanos asserted that this consistent treatment properly assigns costs to those ratepayers receiving benefit for the asset while in service; this applies to all accounts.

Aqua Order at 70. Aqua witness Spanos further explained that the entire cost of the asset, including costs of removal, should be recovered over the useful life of the asset and not recovered from customers after the asset's useful life had ended. *Id.*

In its order the Commission disagreed with the Public Staff's position and instead sided with the Company and its depreciation expert, witness Spanos, finding that

> utilizing the net salvage value percentage for depreciation accrual rates consistently with the new practice of recording the cost of removal is the most appropriate methodology. The Commission understands that using this methodology, the cost of removal for each project will be charged to accumulated depreciation at the same time the Company accrues for the net salvage in rates. *This treatment properly assigns costs to those ratepayers receiving benefit for the asset while in service and properly applies to all accounts.*

Id. at 72 (emphasis added).

In addition, the Commission notes that at least one of DENC's peer utilities regulated by the Commission, Duke Energy Progress, did understand the need to address costs of closure of coal ash impoundments in depreciation allowances, although the amount to be recovered by DEP through depreciation proved inadequate to cover its actual final costs of closure. *See* DEP Rate Case Order, at 42, 138.

In the quote above from DENC Late-Filed Exhibit No. 3, the Company stated that it has relied, in part, on its depreciation consultant for the position it has taken. The Company's expert on depreciation is the firm of Gannett Fleming, Inc., and more specifically Mr. John J. Spanos of that firm. Mr. Spanos signed the cover letters accompanying DENC's 2011 and 2016 depreciation studies as Senior Vice President, Valuation and Rate Division. *See* Docket Nos. E-22, Subs 459 and 479 (updated 2011 depreciation study filed in Docket No. E-22, Sub 493 on April 1, 2013); and Sub 532 (updated 2016 depreciation study filed in Docket No. E-22, Sub 562 on August 21, 2019).

Mr. Spanos has frequently appeared before the Commission and is well-recognized in his field. Although he provided no testimony in the present case, on the point now at issue the Commission finds it appropriate to take judicial notice of testimony he provided in 2015 before the South Dakota Public Utilities Commission where he testified on behalf of Black Hills Power, Inc., an electric utility regulated by the South Dakota Commission.26 This testimony was filed on January 15, 2015, before the date of the Company's most recent depreciation study for its 2016 North Carolina rate case filing.

26 Rebuttal Testimony and Exhibit of John J. Spanos, *Application of Black Hills Power, Inc., for Authority to Increase Rates in South Dakota*, No. EL14-026 (S.D.P.U.C. Apr. 17, 2015), *reh'g denied*, 142

(S.D.P.U.C. May 29, 2015), https://puc.sd.gov/commission/dockets/electric/2014/EL14-026/rebuttalbhp/ spanostestimony.pdf

In the Black Hills Power case an intervenor objected to Mr. Spanos' inclusion of the costs of decommissioning (net salvage value) in the proposed depreciation rates for the utility's coal-fired generating plants. The intervenor's position was that such costs should be recovered only at and after the time of decommissioning when they could be known and measured with certainty. Rejecting that view, Mr. Spanos testified:

> The primary depreciation issue in this case is whether the Company will experience terminal net salvage for their power plants when they are eventually retired. Experience now shows that not only will power plants be retired, but there are significant costs upon retirement related not only to the dismantlement of the plant itself, but also to the remediation of features of the site such as ash ponds. Since these costs are likely to be incurred, intergenerational equity and depreciation authorities require that they be included in depreciation and recovered over the service lives of the plants.

Pre-Filed Rebuttal Testimony of John J. Spanos, *Application of Black Hills Power, Inc., for Authority to Increase Rates*, No. EL14-026, at 4 (S.D.P.U.C. Apr. 17, 2015).

Asked to provide examples of the types of costs to which he was referring, Mr. Spanos testified:

> Duke Energy plans to decommission a number of sites in the Carolinas, and activities related to the retirement of these sites include asbestos removal, demolition and the closure of ash ponds. Dominion Virginia Power is in the process of decommissioning coal units at its Chesapeake Energy Center, North Branch and Yorktown sites.

Id. at 8 (similar testimony given at pp. 9-11).

Buttressing his position by referring to other published authorities, he noted:

The [Uniform System of Accounts] prescribes that net salvage costs should be accrued over the course of an asset's service life (i.e., recognized in each period in which the asset provides service) in a systematic and rational manner. *Net salvage costs should not be recognized in the period in which any salvage-related costs are paid and should not be recovered after these costs are incurred.*

Id. at 15 (emphasis added).

Finally, responding to the intervenor's position that net salvage and cost of removal should remain a fixed value over the entire life of an asset and should not be updated or adjusted, Mr. Spanos testified that not only was period reassessment and updating proper but that it was in fact required as new information became available. *Id.* at 17-18.

Mr. Spanos' testimony before the South Dakota Public Utilities Commission, and his testimony before this Commission in Docket No. W-218, Sub 319 referred to earlier, is a clear rebuke to the Company's position in this case. His views are not idiosyncratic; they are fully in line with widely accepted authority. Mr. Spanos provided the following from the 1996 NARUC manual entitled *Public Utility Depreciation Practices*:

> Historically, most regulatory commissions have required that both gross salvage and cost of removal be reflected in depreciation rates. The theory behind this requirement is that since most physical plant placed in service will have some residual value at the time of retirement, the original cost recovered through depreciation should be reduced by that amount. Closely associated with this reasoning is the accounting principle that revenues be matched with costs and the regulatory principle that utility customers who benefit from the consumption of plant pay for the cost of that plant, no more, no less. The application of the latter principle also requires that the estimated cost of removal of plant be recovered over its life.

NARUC, *Public Utility Depreciation Practices* 157 (1996).

In addition, Mr. Spanos quoted the following from the 1994 edition of *Depreciation Systems*.

> The matching principle specifies that all costs incurred to produce a service should be matched against the revenue produced. Estimated future costs of retiring an asset currently in service must be accrued and allocated as part of the current expenses.

W. C. Fitch and Frank K. Wolf, *Depreciation Systems* 7 (1994).

How, then, does this principle apply in this case to the recovery of the costs for closure of DENC's waste coal ash management facilities? Recognizing the inherent difficulty in accurately forecasting expenditures that will materialize only many years into the future and that must also accommodate evolving standards of industry practice and regulatory requirements, the Commission concludes that it would be unfair to deny recovery altogether based solely on the fact that the Company made no attempt to collect the costs from earlier generations of ratepayers. But by the same token, complete recovery at the expense of current and future ratepayers cannot be squared with the bedrock principles just reviewed. In the end, the Commission concludes that the balancing that will be achieved by a ten-year amortization of DENC's CCR costs without a return is further supported by the failure of DENC to properly account for the full decommissioning costs of its coal-fired power plants and to collect its best reasonable estimate of those costs as part of depreciation allowance, adjusted from time to time as new information was acquired. In addition, the Commission finds good cause to direct that in DENC's next update of its depreciation study it should account for its projected CCR remediation and closure costs in the decommissioning expenses for its coal-fired power plants.

From the separate opinion of Commissioner Clodfelter in the Order:

The Commission has found that in analyzing, proposing, and seeking the establishment of rates that included allowances for depreciation associated with its coal-fired generating units the Company failed to include any amounts for the costs of final remediation or closure of the waste ash management units associated with these plants. Had the Company done so, then at least some portion, if not all, of the costs for which it now seeks recovery, including the Actual CCR Expenditures for the Deferral Period, would have been recovered as an annual operating expense as part of the rates applicable to service provided in earlier periods. Put differently, had the Company properly anticipated, estimated, and collected as part of depreciation allowance amounts that were later required for Actual CCR Expenditures made during the Deferral Period, it would have thereby accrued a reserve from the revenues earned under prior rates that could have been used to offset or avoid some, if not all, of the Deferral Period Return that it now seeks and that the Commission has approved. I cannot reconcile the Commission's admonishment that the Company did not properly account for or seek recovery of the Actual CCR Expenditures, as part of net salvage value included in depreciation allowance, with the Commission's acceptance of the Company's present request that it be allowed the Deferral Period Return in order to assist in managing the cash flow needs associated with its CCR remediation and closure activities.

(Footnote omitted.)

. . . .

I concur with both the Commission's order and with the Public Staff that there is ample legal basis for the Commission to allocate or divide the cost burden between ratepayers and the Company's shareholders. For myself, the point of difference I have with the Public Staff is not over the concept of "equitable sharing" or the legal basis for application of that concept, but over the specific equities of this case that warrant invoking it. I find sufficient support for the result reached by the Commission in the analysis and discussion associated with Findings of Fact Numbers 56 through 58, and I do not need to go further than the scope of those findings to reach that result. The Company's failure to make any provision over the useful lives of its coal-fired generating plants for recovery of the ultimate costs of remediation and closure of waste coal ash management facilities is ample ground for the Commission to find that a portion of the costs now incurred for such remediation and closure must be borne by the Company itself and not by present and future ratepayers. The Commission's selection of a ten-year period for amortization of those costs achieves a fair and reasonable balance of cost-sharing between ratepayers and the Company.