

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. E-2, SUB 1204

In the Matter of)	TESTIMONY OF
Application by Duke Energy Progress,)	JAY B. LUCAS
LLC, Pursuant to G.S. 62-133.2 and)	PUBLIC STAFF – NORTH
Commission Rule R8-55 Regarding Fuel)	CAROLINA UTILITIES
and Fuel-Related Costs Adjustments for)	COMMISSION
Electric Utilities)	

1 **Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND PRESENT**
2 **POSITION.**

3 A. My name is Jay Lucas. My business address is 430 North Salisbury Street,
4 Dobbs Building, Raleigh, North Carolina. I am an engineer with the Electric
5 Division of the Public Staff – North Carolina Utilities Commission.

6 **Q. BRIEFLY STATE YOUR QUALIFICATIONS AND DUTIES.**

7 A. My qualifications and duties are included in Appendix A.

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

9 A. The purpose of my testimony is to present to the Commission the Public
10 Staff's position on whether Duke Energy Progress, LLC, (DEP or the
11 Company), should be permitted to recover the cost of liquidated damages
12 paid to CertainTeed Gypsum NC, Inc. (CertainTeed), in the fuel rider
13 proceeding filed by DEP in this docket on June 11, 2019.

14 **Q. PLEASE DESCRIBE CERTAINTEED.**

15 A. CertainTeed manufactures drywall, also known as gypsum board, for the
16 construction industry. BPB NC, Inc. (BPB) is the predecessor of
17 CertainTeed and was the original party to the contract with DEP for the
18 delivery of gypsum, as described later in my testimony.

19 **Q. WHAT IS GYPSUM?**

20 A. Gypsum is a mineral that is the primary component of gypsum board and
21 can be mined in its natural state. However, artificial gypsum is a suitable

1 substitute and is a by-product of the flue gas desulfurization (FGD)
2 equipment installed at some coal-fired power plants.

3 **Q. PLEASE DESCRIBE THE RELATIONSHIP BETWEEN DEP AND**
4 **CERTAINTEED.**

5 A. In 2004, DEP's predecessor, Progress Energy Carolinas, Inc. (PEC), began
6 planning to install FGD equipment at its Roxboro and Mayo coal-fired power
7 plants in order to comply with the stricter air pollution control requirements
8 of N.C. Gen. Stat. § 62-133.6 (also known as the Clean Smokestacks Act
9 or CSA) that was enacted in June, 2002. Both plants had been built many
10 years earlier to meet the baseload demand of DEP's customers. The
11 Roxboro plant consists of four generating units with a total capacity of 2,462
12 MW (winter rating), and the Mayo plant has one generating unit with a
13 capacity of 746 MW (winter rating). Both of these plants are located in
14 Person County, North Carolina, approximately 16 road miles apart. DEP's
15 CSA compliance plan called for FGD equipment to be installed and
16 operational at Roxboro Units 2 and 4 in 2007, Roxboro Units 1 and 3 in
17 2008, and Mayo in 2009.

18 Also in 2004, in order to mitigate the cost of disposing the gypsum produced
19 in the FGD process, DEP executed a contract with BPB for the future sale
20 of artificial gypsum from the Roxboro and Mayo plants to BPB for the
21 manufacture of gypsum board. In 2005, BPB acquired approximately 121
22 acres of land from DEP adjacent to the Roxboro plant with the intent of

1 constructing a gypsum board manufacturing facility. Also in 2005,
2 CertainTeed's parent company, Saint-Gobain North America, bought BPB
3 and merged it with the existing CertainTeed operations. CertainTeed
4 delayed construction of the facility due to the housing market decline and
5 economic downturn (Great Recession).

6 As a result of the Great Recession, in late 2007, CertainTeed contacted
7 DEP in an effort to amend the 2004 agreement and to maintain the supply
8 of artificial gypsum in the future.

9 In 2008, the parties executed an Amended and Restated Supply Agreement
10 that made refinements to the 2004 contract. CertainTeed began accepting
11 artificial gypsum from DEP on May 1, 2009, but transported it to other
12 locations because the CertainTeed facility adjacent to the Roxboro plant
13 had not yet been completed. The CertainTeed facility began operation on
14 March 28, 2012. In August 2012, DEP and CertainTeed executed a Second
15 Amended and Restated Supply Agreement (2012 Agreement). Two key
16 provisions of the 2012 Agreement were that DEP would provide 50,000 tons
17 of gypsum per month to CertainTeed and would maintain a gypsum
18 stockpile of 250,000 tons.

19 **Q. WHAT OCCURRED TO DISRUPT THE ARRANGEMENT BETWEEN DEP**
20 **AND CERTAINTEED FOR THE SUPPLY OF ARTIFICIAL GYPSUM?**

1 A. Several events led to the reduced dispatch of the Roxboro and Mayo plants
2 and, as a result, the decreased production of artificial gypsum below the
3 amounts required in the contract with CertainTeed.

4 First, in 2012, Duke Energy Corporation merged with PEC and eventually
5 renamed it DEP, placing DEP and Duke Energy Carolinas, LLC (DEC),
6 under single ownership. One of the primary outcomes of the merger was
7 the creation of the Joint Dispatch Agreement (JDA) that facilitated the
8 transfer of economic energy purchases between DEC and DEP resulting
9 from the maximization of joint least cost dispatch of generation. The JDA
10 allowed DEC to sell cheaper energy to DEP when not needed for DEC's
11 own use; as a result, DEP's Roxboro and Mayo generating plants operated
12 less often than before the merger.

13 Second, natural gas prices significantly declined after 2009 and have not
14 approached the 2009 prices since. This decline in natural gas prices
15 resulted in utilities dispatching natural gas-fired combined cycle plants
16 (CCs) ahead of coal-fired plants. The decline was attributable in part to the
17 increase in hydraulic fracturing technology, which greatly increased natural
18 gas supply, and the Great Recession, which resulted in lower demand for
19 all forms of energy. As the recession eased and the economy improved,
20 natural gas prices remained near historic lows, leading to low spot market
21 purchases as well as low prices for forward hedging. Coal prices generally
22 fell over this same time period, but did so more moderately.

1 When DEP and CertainTeed executed the 2012 Agreement, DEP had only
2 two operational CC units, both at the Smith Energy Complex. However,
3 DEC had placed its Buck CC in operation in 2011, and its Dan River CC
4 became operational in late 2012. Both of these plants became available to
5 supply DEP when appropriate under the terms of the JDA. Furthermore,
6 DEP completed its H. F. Lee CC in late 2012 and its Sutton CC in 2013.

7 The effect of low natural gas prices and the large increase in natural gas-
8 fired CC capacity resulted in the Roxboro and Mayo power plants being
9 dispatched less. The reduced dispatch resulted in less coal burned,
10 resulting in the inability of DEP to provide the quantities of artificial gypsum
11 that CertainTeed contracted for and anticipated when it built the gypsum
12 board manufacturing facility next to the Roxboro plant.

13 On March 9, 2017, DEP sent CertainTeed a letter stating that the artificial
14 gypsum stockpile would fall below the minimum 250,000 tons required in
15 the 2012 Agreement. In addition, DEP did not deliver the 50,000 tons per
16 month under the 2012 Agreement for the months of May 2017, June 2017,
17 and September 2017 through January 2018.

18 DEP took the position that the 2012 Agreement allowed DEP to deliver
19 flexible amounts of artificial gypsum to CertainTeed, but CertainTeed's
20 understanding was that the 2012 Agreement required DEP to deliver a firm
21 minimum amount of gypsum of 50,000 tons per month and to maintain a
22 stockpile of 250,000 tons. On June 30, 2017, CertainTeed filed a lawsuit

1 against DEP in North Carolina Superior Court; the case was designated as
2 a mandatory complex business case.¹

3 **Q. HOW WAS THE PROBLEM OF DEP'S INABILITY TO SUPPLY**
4 **ARTIFICIAL GYPSUM TO CERTAINTEED ULTIMATELY RESOLVED?**

5 A. In an Opinion and Final Judgment entered on August 28, 2018, the Court
6 sided with CertainTeed's interpretation as to the amount of gypsum DEP
7 was required to deliver and the size of the stockpile DEP was required to
8 maintain under the 2012 Agreement. The Court's judgment, among other
9 things, ordered DEP to:

- 10 1) Pay \$1,084,216.75 to CertainTeed, which includes interest,
11 representing the cost of the gypsum CertainTeed purchased
12 at prices above the contract price provided in the 2012
13 Agreement between May 2017 and January 2018 (Judgment
14 Payment).
- 15 2) Deliver 119,768.03 tons of gypsum within 30 days at the
16 agreed-to contract price.
- 17 3) Provide a Replenishment Plan to CertainTeed within 90 days,
18 consistent with the amount of gypsum required under the
19 2012 Agreement.

20 After the judgment was entered, DEP and CertainTeed reached a
21 settlement.

22 **[BEGIN CONFIDENTIAL]** [REDACTED]

23 [REDACTED]

¹ CertainTeed Gypsum NC, Inc., v. Duke Energy Progress, LLC, 2017CVS395, located at ncbc.nccourts.org/public.

1 [REDACTED]
2 [REDACTED]
3 [REDACTED]
4 [REDACTED]
5 [REDACTED]
6 [REDACTED]
7 [REDACTED]
8 [REDACTED] [END CONFIDENTIAL]

9 **Q. WHAT EXPENSES HAS DEP REQUESTED FOR RECOVERY IN THIS**
10 **FUEL CASE RELATED TO THE LEGAL ACTION TAKEN BY**
11 **CERTAINTEED?**

12 **A.** DEP seeks to recover the Judgment Payment and the liquidated damages
13 from ratepayers through the fuel adjustment clause. The testimony of DEP
14 witness Dana Harrington presents the Company's explanation and
15 justification for including the CertainTeed expenses in this fuel proceeding
16 on pages 11 and 12. DEP proposes to recover the costs as the amounts
17 are paid. DEP's request in this case, on a system-wide basis, is \$8,400,000
18 for the billing period, or \$5,181,120 for its North Carolina retail jurisdiction.

19 **Q. WHAT DOES THE PUBLIC STAFF RECOMMEND REGARDING DEP'S**
20 **REQUESTED COST RECOVERY RELATED TO THE LEGAL ACTION**
21 **TAKEN BY CERTAINTEED?**

1 A. The Public Staff recommends that the Commission deny DEP's request for
2 recovery of the costs because they are not appropriate for recovery in a fuel
3 proceeding. DEP considers these costs to be related to N.C. Gen. Stat. §
4 62-133.2(a1)(9), which allows recovery of gains and losses on the sale of
5 by-products produced in the electric generation process. N.C. Gen. Stat. §
6 62-133.2(a1)(9) reads as follows:

7 Cost of fuel and fuel-related costs shall be adjusted for any
8 net gains or losses resulting from any sales by the electric
9 public utility of by-products produced in the generation
10 process to the extent the costs of the inputs leading to that by-
11 product are costs of fuel or fuel-related costs.

12 Company witness Harrington asserts on page 12 that the liquidated
13 damages should be included because the liquidated damages provision
14 was "an essential commercial term of a larger transaction that was
15 reasonably and prudently entered into by the Company for the benefit of
16 customers." Notably, witness Harrington does not assert that the payment
17 of liquidated damages constitutes a "sale" of a byproduct, and for good
18 reason. Leaving aside whether the transaction, or the amount of the
19 Judgment Payment and liquidated damages paid by the Company in

7 Q. IN WHAT TYPE OF PROCEEDING SHOULD THE COMMISSION
8 CONSIDER THESE COSTS?

11 Q. IS THE PUBLIC STAFF MAKING A RECOMMENDATION ON THE
12 REASONABLENESS AND PRUDENCE OF THESE COSTS AND
13 WHETHER THEY SHOULD BE APPROVED IN A GENERAL RATE
14 CASE?

[REDACTED]

[END CONFIDENTIAL]

1 A. No. While the Public Staff has concerns regarding the reasonableness and
2 prudence of the costs, the Public Staff is only recommending that these
3 costs not be considered appropriate for inclusion in this or any fuel case as
4 a gain or loss on a sale of a byproduct.

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

6 A. Yes, it does.

APPENDIX A**QUALIFICATIONS AND EXPERIENCE**

JAY B. LUCAS

I graduated from the Virginia Military Institute in 1985, earning a Bachelor of Science Degree in Civil Engineering. Afterwards, I served for four years as an engineer in the U. S. Air Force performing many civil and environmental engineering tasks. I left the Air Force in 1989 and attended the Virginia Polytechnic Institute and State University (Virginia Tech), earning a Master of Science degree in Environmental Engineering. After completing my graduate degree, I worked for an engineering consulting firm and worked for the North Carolina Department of Environmental Quality in its water quality programs. Since joining the Public Staff in January 2000, I have worked on utility cost recovery, renewable energy program management, customer complaints, and other aspects of utility regulation. I am a licensed Professional Engineer in North Carolina.

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