# Blue Ridge Environmental Defense League

www.BREDL.org PO Box 88 Glendale Springs, North Carolina 28629 BREDL@skybest.com (336) 982-2691

March 9, 2015

Kimberly D. Bose, Secretary Federal Energy Regulatory Commission 888 First Street NE, Room 1A Washington, DC 20426

**RE: Docket Nos. PF15-5-000 and PF15-6-000, Scoping of Environmental Impacts** Supply Header ProjectóDominion Transmission, Inc. and Atlantic Coast Pipeline, LLC.

Dear Secretary Bose:

On behalf of the Blue Ridge Environmental Defense League and its chapters and members in Virginia and North Carolina, I write to provide comments on the scope of the environmental impact statement for the proposed projects.

### Overview

The pipeline projects outlined in this pre-filing docket represent a massive assault on the environment and the communities along the proposed routes. Moreover, the impacts of extraction, transport and combustion of the fossil fuel which natural gas is will add to the devastating impacts on the entire planet. Under the law, these global impacts must be accounted for by the Federal Energy Regulatory Commission; i.e., to õrecognize the worldwide...environmental problems and...maximize international cooperation.ö<sup>1</sup> Once the impacts are weighed, we believe the no action alternativeô that is, the denial of the certificate of convenience and public necessityô will be the agency⁄s only recourse.

#### Background

The proposal under consideration includes multiple facilities which would be capable of delivering 1.5 billion cubic feet of natural gas per day. The EIS would encompass 592 miles of pipelines, seven compressor stations, and numerous valves, pig sites and other appurtenances in four states. See Table A on page 2. The projects would disrupt 12,972 acres of land during construction and retain 4,370 acres permanently.

## Comments

The environmental impacts of such a large number of facilities would be devastating to the environment and public health. Natural gas extracted by hydraulic fracturing, or fracking, is transported in trucks, compressed and delivered by pipelines. At each stage in this process, pollution is created. A major source of air pollution from natural gas pipelines is compressor stations. Spaced about 50 to 100 miles apart, they keep the gas moving along the pipeline from production site to end use. Power for these compressors is provided by internal combustion engines, turbine or reciprocating, which use natural

<sup>&</sup>lt;sup>1</sup> National Environmental Policy Act, §102(2)

gas as a fuel source. These engines release huge amounts of air pollution including sulfur dioxide (SO2), nitrogen oxides (NOx), volatile organic compounds (VOC), carbon monoxide (CO), particulate matter (PM10), and hazardous air pollutants such as benzene and formaldehyde. Our review of compressor stations in Virginia and North Carolina reveals high levels of air pollution.

Facility	Size	Location (counties, state)
ACP pipeline	295.6 miles	Harrison, Lewis, Upshur,
	42-inch diameter	Randolph, Pocahontas in
		WV, Highland, Augusta,
		Nelson, Buckingham,
		Cumberland, Prince
		Edward, Nottoway,
		Dinwiddie, Brunswick,
		Greensville in Virginia, and
		Northampton in NC.
ACP pipeline	179.9 miles	Northampton, Halifax,
	36-inch diameter	Nash, Wilson, Johnston,
		Sampson, Cumberland,
		Robeson in NC
ACP lateral pipeline	75.7 miles	Northampton in NC,
	20-inch diameter	Greensville, Southampton,
		Suffolk, Chesapeake in VA
ACP lateral pipeline	3.1 miles	Brunswick in VA
	16-inch diameter	
3 Compressor stations	Three new stations totaling	Lewis, WV
	108,275 horsepower	Buckingham, VA
		Northampton, NC
SHP loop	34.9 miles	Harrison, Doddridge, Tyler,
	36-inch diameter	Wetzel in WV
SHP loop	3.8 miles	Westmoreland, PA
	30-inch diameter	
4 Compressor stations	Four station modifications	Westmoreland, PA
	with combined increase of	Green, PA
	75,700 horsepower	Marshall, WV
		Wetzel, WV

 Table A. Facilities Included in FERC Docket Nos. PF15-5-000 and PF15-6-000

A compressor station in North Carolina operates eight natural gas-fired reciprocating internal combustion engines with a combined total of 37,880 horsepower.<sup>2</sup> This is a medium sized compressor, one of the two moving gas along a 128 mile pipeline from Charlotte to Wilmington, North Carolina. Our review of the state air permit reveals the pollution levels in Table B (next page) and shows an astounding level of greenhouse gas emissions (CO<sub>2</sub>e)ô over 200 thousand tons per yearô plus over a half a million pounds

<sup>&</sup>lt;sup>2</sup> Piedmont Natural GasóWadesboro Compressor Station in North Carolina, NC Division of Air Quality Permit No. 10097T01

Table D. Medium Sized Compressor Station An Tonution		
Pollutant	<b>Annual Emission Rates</b>	
CO <sub>2</sub> e	203,824 tons	
Particulates (2.5, 10 and total)	24,920 pounds	
SO <sub>2</sub>	1,460 pounds	
NO <sub>x</sub>	367,720 pounds	
VOC	70,100 pounds	
СО	43,960 pounds	
HAP total	25,020 pounds	
HAP formaldehyde	17,560 pounds	

of toxic air pollution.

Table B. Medium Sized Compressor Station Air Pollution

The Transcontinental Gas Pipeline Corporationøs Compressor Station No. 165 in Pittsylvania County, Virginia, has eleven internal combustion reciprocating engines with a combined total of 24,400 horsepower. The pollution totals for this unit are also large.

Formaldehyde emissions are commonly associated with the burning of natural gas, and compressors release huge amounts of this hazardous air pollutant. The negative effects of airborne formaldehyde occur at very low levels. Exposure to as little as 0.1 to 2 parts per million causes irritation of the eyes, nose and throat. At 5 to 10 ppm, people experience cough, tightness of the chest and eye damage. At 20 ppm breathing becomes difficult, at 30 ppm there is severe injury to the lungs and 100 ppm is immediately dangerous to life.

The lateral segment of the Atlantic Coast Pipelineô extending 75 miles from Northampton County, North Carolina to Chesapeake County, Virginiaô reveals an unacknowledged aspect of the project: the export of natural gas from West Virginia, Virginia and North Carolina via ocean-going ships to ports around the world. A liquefied natural gas terminal is a foreseeable outcome of the proposed pipelines extending across three states pointing like an arrow to the seaports at Hampton Roads, Virginia. Today, ships transporting natural gas with a capacity of up to 145,000 cubic meters are common. The comprehensive review, the *hard look*, required by the National Environmental Policy Act must encompass the sum of cumulative impacts from extraction to end use, no matter where that end use occurs, including export terminals and liquefied natural gas exports.

# Conclusion

The impacts on the land, air and water resources which would occur if this project advances are contrary to the letter and the spirit of the National Environmental Policy Act, which is to prevent or eliminate damage to the environment and the biosphere. We plan to submit further comments

Respectfully submitted,

Louis A. Zeller, Executive Director