
Re: In The Matter of the Application of Public Service Company of Colorado For Approval of its 2007 Colorado Resource Plan))))))	Third Set of Discovery Requests Of Ms. Glustrom Served On Public Service Company
Docket No. 07A-447E)	March 7, 2008

DISCOVERY REQUEST LWG3-5:

For each coal plant on PSCo's system, please provide the following:

- a) Emissions of SO₂ for each year from 2003-2007 and estimated emissions for 2010, 2015, 2020, 2025, 2030, 2035 and 2040 and actual or estimated costs for SO₂ emissions for each of these years.
- b) Emissions of NO_x for each year from 2003-2007 and estimated emissions for 2010, 2015, 2020, 2025, 2030, 2035 and 2040.
- c) Emissions of particulates for each year from 2003-2007 and estimated emissions for 2010, 2015, 2020, 2025, 2030, 2035 and 2040.
- d) Emissions of volatile organic compounds for each year from 2003-2007 and estimated emissions for 2010, 2015, 2020, 2025, 2030, 2035 and 2040.
- e) Emissions of carbon monoxide for each year from 2003-2007 and estimated emissions for 2010, 2015, 2020, 2025, 2030, 2035 and 2040.
- e) Emissions of mercury for each year from 2003-2007 and estimated emissions for 2010, 2015, 2020, 2025, 2030, 2035 and 2040.
- f) Plans for controlling mercury emissions in 2010, 2015, 2020, 2025, 2030, 2035 and 2040, a description of the technology intended to be used for mercury control, whether the Company believes this control will qualify as Maximum Available Control Technology ("MACT") and the estimated cost of controlling mercury in each of these years.
- g) Pollution control equipment on each coal unit and approximate level of control achieved for each pollutant controlled by that equipment.

RESPONSE:

- a) Actual SO₂ emissions for **2003 – 2007** are contained in Attachment LWG3-5.A1. Actual costs for SO₂ control reagents at each plant with existing SO₂ controls are noted below.

RESPONSE TO DISCOVERY REQUEST LWG3-5 continued:

PSCo SO2 Annual Reagent Costs (\$/year)

Plant	2003	2004	2005	2006	2007
Arapahoe	708,976	383,030	523,082	768,875	674,478
Cherokee	3,400,369	1,761,878	2,825,260	3,491,971	3,532,892
Valmont	693,829	522,351	613,216	680,685	845,723
Hayden	1,054,895	1,315,588	1,534,912	1,819,243	2,076,201

b), c), d), e), f) See Attachment LWG3-5.A1 for **2003 - 2007** to question a) above regarding emissions of NOx, particulate, volatile organic compounds, carbon monoxide, and mercury.

f) The plans for controlling mercury on the PSCo units includes sorbent injection on all the Comanche units starting in late 2009 and on Pawnee Unit 1 starting in late 2011. Current Colorado mercury control regulations require some of our remaining units to begin controlling mercury in 2014. Specific compliance plans regarding the 2014 mercury control requirements have not been developed. The company does not know whether any of the proposed mercury controls will meet future Maximum Achievable Control Technology (MACT) requirements until EPA promulgates those rules. Future costs for mercury emission controls have not been developed at this time.

g) See Attachment LWG3-5.A1 for a list of the pollution control equipment on each unit and the approximate level of control.

a-f) **For future**, estimated emissions in parts a through f see Attachment LWG3-5.A2_future.xls for emissions levels for PSCo owned coal plants. The Strategist model does not provide SO2 emission cost output on a plant level, however aggregate SO2 emission costs in dollars for the PSCo owned coal plants were provided in response LWG1-10.xls (see worksheet "Annual_Estimated_Emission_Costs").

Sponsor: Gary Magno and Jim Hill

Response Date: March 21, 2008