Item #080183
August 16, 2011

Regional Utilities Committee
Coal Acquisition Policy Summary

Background: GRU's Deerhaven Unit No. 2 operates under an air operating permit that requires the unit to emit no greater than 1.2 pounds of Sulfur Dioxide per Million Btu of coal input to the boiler. Construction of the Deerhaven AQCS (Air Quality Control System) allows GRU to meet this requirement while burning coals that contain up to a maximum of 4.5 pounds of Sulfur Dioxide per Million Btu. Total direct cost consists of the commodity cost of coal at the mine, the transport rate to deliver the coal to the plant, and the cost of transportation equipment. Additional indirect costs include the cost of lime and urea to process emissions from the coal, incremental maintenance costs resulting from use of the coal and the projected cost of replacement power resulting from forced outages associated with any given coal. The complexity of modern generating and emissions control equipment and the scope of the many costs that must be quantified and controlled dictate a need for maximum flexibility in coal sourcing.

Coal is purchased under several different procurement mechanisms. The most common are (1) long term contracts with a term of 2-5 years, (2) short term contracts, one year or less and (3) spot purchases, variable terms which may be as little as one train or six months of deliveries. Utilities historically prefer long term contracts for the bulk of purchases to insure reliability, consistent quality, and insulation from price volatility. Long term contracts may have a fixed price for the entire term, a fixed price with annual escalations for inflation, or a fixed price adjusted quarterly for inflation and/or prevailing market price. While coal can be purchased on a delivered basis, the most common purchase for rail delivery is mine mouth (FOB mine) with separate contracts for rail transportation.
GRU owns a 110 aluminum car, rapid dump unit train. The unit train operates 365 days per year transporting coal from the Central Appalachian coal producing region. A round trip takes approximately seven days. Central Appalachian mines have historically been the most economic source of GRU coal due to the proximity of the coal fields and the availability of low cost, high quality compliance coals. Central Appalachia coal field reserves are approaching depletion and mining costs have risen significantly. The remaining coal has become an increasing target for metallurgical and foreign coal buyers due to the coal quality and access to eastern marine terminals. Offshore demand for U.S. metallurgical and steam coal has driven 2012 steam coal prices above $80/Ton. Other issues increasing supply risks and production/sales costs are increasing regulatory pressure on strip mining, declining quality of coal reserves, declining productivity and the ongoing debate in the environmental and regulatory communities regarding the social costs of mining. While the bulk of the debate regarding social

costs has revolved around strip mining in Central Appalachia, the debate continues for all mining types and oil and gas production.

Utilities have responded to high prices by test burning and purchasing coals from other producing regions such the Powder River Basin, Illinois, Indiana, West Kentucky and Northern Appalachia. The construction of the Air Quality Control System at Deerhaven Unit No. 2 allows GRU to have the same access to other producing regions and coal qualities.

GRU Coal Acquisition Policy:

GRU has a fiduciary responsibility to minimize the total cost of coal, as a power generation fuel charged to customers while (a) maintaining acceptable levels of supply reliability, (b) achieving stable, competitive commodity prices and (c) minimizing fuel related impacts to Deerhaven Unit 2 reliability and maintenance costs.

To this end, GRU prefers to do business directly with coal suppliers and performs extensive analytical modeling of plant performance in identifying alternative sources of coal.