EXHIBIT SC-6 (JIF-6)



# 2008 Integrated Resource Plan Volume I





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Pacific Power | Rocky Mountain Power | PacifiCorp Energy

plementation rules among multiple programs might cause some market participants to retreat from specific trading hubs that are caught in a jurisdictional web of rules and ambiguity.

#### **CURRENTLY REGULATED EMISSIONS**

Currently, PacifiCorp's generation units must comply with the federal Clean Air Act (CAA) which is implemented by the States subject to Environmental Protection Agency (EPA) approval and oversight. The Clean Air Act directs the EPA to establish air quality standards to protect public health and the environment. PacifiCorp's plants must comply with air permit requirements designed to ensure attainment of air quality standards as well as the new source review (NSR) provisions of the CAA. NSR requires existing sources to obtain a permit for physical and operational changes accompanied by a significant increase in emissions.

#### **Ozone**

Final action on the revisions to the National Ambient Air Quality Standards for ozone was completed on March 12, 2008. The EPA announced that the National Ambient Air Quality Standards for primary and secondary ground-level ozone would be significantly strengthened. The primary ozone standard, which is designed to protect public health and the secondary standard, which is designed to protect public welfare (including crops, vegetation, wildlife, buildings, national monuments, and visibility) from the negative effects of ozone, were both reduced to 0.075 parts per million.

The new standards took effect on May 27, 2008. States have until March 12, 2009, to make recommendations to the EPA as to whether an area should be designated attainment (meeting the standard), nonattainment (not meeting the standard) or unclassifiable (not enough information to make a decision). The EPA must promulgate its attainment/nonattainment designations by March 12, 2010, unless a one-year extension is granted because of insufficient information. By March 12, 2011, or one year after the EPA promulgates its designations, states will be required to submit their state implementation plans detailing how they will meet the new standards. A number of rules have been issued by the EPA that will potentially help states make progress toward meeting the revised ozone standards, including the Clean Air Interstate Rule to reduce ozone forming emissions from power plants in the eastern United States, and the Clean Diesel Program to reduce emissions from highway, non-road and stationary diesel engines nationwide.

Immediately following the promulgation of the strengthened ozone standards, multiple lawsuits were filed against the EPA. New York and thirteen other states sued the Environmental Protection Agency on May 27, 2008, demanding stricter air quality standards for ozone. New York was joined in the lawsuit by California, Connecticut, Delaware, Illinois, Massachusetts, Maryland, Maine, New Hampshire, New Jersey, New Mexico, Oregon, the Pennsylvania Department of Environmental Protection, and Rhode Island. New York City and the District of Columbia also joined in the lawsuit. A coalition of environmental and public health advocates also filed a lawsuit against the Environmental Protection Agency on May 27, 2008, in a bid to strengthen the ozone standard. Meanwhile, Mississippi and a coalition of industry trade groups filed separate petitions for review May 23, 2008, and May 27, 2008, respectively, in the District of Columbia Circuit Court of Appeals, arguing the new standards are too strict.

After EPA tightened the 8-hour standard to 0.075 parts per million, several Utah counties located along the Wasatch Front were put in jeopardy of being designated non-attainment. Utah is now using certified monitored ozone data from 2005–2007 to determine specifically which areas need to be designated non-attainment of the 0.075 parts per million standard. The state must submit a recommendation to the EPA by March 2009. The EPA will then either accept or modify the state's recommendation, based on certified data from 2006-2008, and issue a final designation by March 2010. In Utah, ozone is principally a summer time problem when temperatures are high and daylight hours are long, but it may have implications to wintertime particulate problems as well. It is a mix of chemicals emitted mainly from vehicle tailpipes, diesel engines and industrial smokestacks. The Utah Department of Environmental Quality has indicated that its anticipated control strategy would focus on transportation, including tightening regulations for gasoline stations, and possibly consumer products, and certain industrial emissions.

Currently, with the exception of the Gadsby power plant, all of PacifiCorp Energy's operating fossil-fueled facilities are located in areas that are in attainment with the ozone National Ambient Air Quality Standards. The Gadsby plant is a gas fired facility located in downtown Salt Lake City, Salt Lake County, Utah. Salt Lake County is currently a non-attainment area for ozone. The Utah Department of Environmental Quality has stated that at this time, no coal- or natural gas-fueled power plants will be the subject of new control strategies.

## **Particulate Matter**

On October 17, 2006, the EPA issued new National Ambient Air Quality Standards for particle pollution. The final standards addressed two categories of particle pollution: fine particles (PM<sub>2.5</sub>), which are 2.5 micrometers in diameter and smaller; and inhalable coarse particles (PM<sub>10</sub>), which are smaller than 10 micrometers. The Environmental Protection Agency strengthened the 24-hour fine particle standard from the 1997 level of 65 micrograms per cubic meter to 35 micrograms per cubic meter, and retained the current annual fine particle standard at 15 micrograms per cubic meter. The Agency also retained the existing national 24-hour PM<sub>10</sub> standard of 150 micrograms per cubic meter and revoked the annual PM<sub>10</sub> standard.

The new federal standards has put Utah's Wasatch Front – including all of Salt Lake and Davis Counties and portions of Weber, Box Elder and Toole counties - into a "non-attainment" status as well as the low-lying portions of Utah and Cache Counties. Utah has until 2012 to draft a plan to EPA on how it will achieve compliance with the fine particulate NAAQS. According to the Utah Department of Environmental Quality, much of the particulate pollution is attributable to emissions from automobiles. Utah's monitoring suggests a seasonal problem characterized by episodic periods of very high concentrations of fine particulate that consists mostly of secondary particulate. The formation of these secondary particles is driven by winter-time temperature inversions which trap air in urbanized valleys. The mix of emissions associated with the urbanized areas reacts very quickly under these conditions to produce spikes in the concentration of fine particulate. Under these conditions, the observed concentrations are fairly uniform throughout the entire urbanized area. This underscores the association of urban areas with a mix of emissions that inherently reacts under these conditions to form PM2.5, and helps to define PM2.5 somewhat as an "urban" pollutant. All of this serves to highlight the distinction between urban and rural areas. Much of this phenomenon is also due to the fact that population is generally located within the lowland valley areas in which air is easily trapped by a temperature inversion. In other words, it is not enough to simply have an urban area with an urban mix of emissions; there must also be a barrier to dispersion under these conditions, which allows PM2.5 concentrations to build up over a period of several days and reach concentrations that exceed the NAAQS. This characterization of Utah's difficulties with fine particulate has shaped the State's approach to making the area designations.

Currently, with the exception of the Gadsby power plant, all of PacifiCorp's operating fossilfueled facilities are located in areas that are in attainment with the fine particulate National Ambient Air Quality Standard. The Gadsby plant is a gas-fired facility located in downtown Salt Lake City, Salt Lake County, Utah. Salt Lake County has been proposed as a non-attainment area for fine particulate matter. The Utah Department of Environmental Quality has stated that at this time, no coal- or natural gas-fueled power plants will be the subject of new fine particulate matter control strategies.

### **Regional Haze**

Within existing law, EPA's Regional Haze Rule and the related efforts of the Western Regional Air Partnership will require nitrogen oxide, sulfur dioxide, and particulate matter emissions reductions to improve visibility in scenic areas. Arizona, New Mexico, Oregon, Utah and Wyoming originally submitted state implementation plans addressing regional haze based upon 40 CFR 51.309, focusing on the reduction of sulfur dioxide emissions from large industrial sources located throughout the West. Regional Sulfur Dioxide Emissions and Milestone Reports, one of the requirements of the 309 state implementation plan, are submitted each year. The reports determine whether sulfur dioxide emitted by large industrial sources exceeds the sulfur dioxide emission milestones set in the states' Regional Haze state implementation plans. The sulfur dioxide emissions reductions either achieved or expected to be achieved from the installation of Best Available Retrofit Technology on eligible units.

The State of Wyoming submitted revisions to the 2003 309 Regional Haze state implementation plan to EPA Region 8 on November 24, 2008 and will now focus on impairment caused by sources of nitrogen oxides and particulate matter. Work on this phase of regional haze planning is underway with a draft SIP expected in the spring of 2009. Utah similarly adopted revisions to its regional haze state implementation plan on September 3, 2008, which became effective and enforceable in Utah on November 10, 2008. The package of materials was submitted to the EPA on September 18, 2008 and will become federally enforceable after EPA approves them.

Additionally, administrative rulemakings by EPA, including the Clean Air Interstate Rule will require significant reductions in emissions from electrical generating units that directly impact the national market for sulfur dioxide allowances. Compliance costs associated with anticipated future emissions reductions will largely depend on the levels of required reductions, the allowed compliance mechanisms, and the compliance time frame.

#### Mercury

In March 2005, the EPA released the final Clean Air Mercury Rule ("CAMR"), a two-phase program that would have utilized a market-based cap and trade mechanism to reduce mercury emissions from coal-burning power plants from the 1999 nationwide level of 48 tons to 15 tons. The CAMR required initial reductions of mercury emission in 2010 and an overall reduction in

mercury emissions from coal-burning power plants of 70 percent by 2018. The individual states in which PacifiCorp operates facilities regulated under the CAMR submitted state implementation plans reflecting their regulations relating to state mercury control programs. On February 8, 2008, a three-judge panel of the United States Court of Appeals for the District of Columbia Circuit held that the EPA improperly removed electricity generating units from Section 112 of the Clean Air Act and, thus, that the CAMR was improperly promulgated under Section 111 of the Clean Air Act. The court vacated the CAMR's new source performance standards and remanded the matter to the EPA for reconsideration. On March 24, 2008, the EPA filed for rehearing of the decision of the three-judge panel by the full court; rehearing was denied in May 2008. On September 17, 2008, the Utility Air Regulatory Group petitioned the United States Supreme Court for a writ of certiorari to review the United States Court of Appeals for the District of Columbia Circuit's February 8, 2008 decision overturning the rule. The EPA filed a petition to the United States Supreme Court on October 17, 2008 seeking to overturn the lower court's ruling.

While the Supreme Court considers whether to grant the petition for a writ of certiorari, all new coal fueled electric generating units and modifications of existing units will be required to obtain permits under Section 112 (g) of the Clean Air Act.<sup>7</sup> Under this provision, if no applicable emission limits have been established for a category of listed hazardous air pollutant sources, no person may construct a new major source or modify an existing major source in the category unless the EPA Administrator or the delegated state agency determines on a case by case basis that the unit will meet standards equivalent to the maximum achievable emission controls. Thus, new major sources or modifications to an existing major source would be required to perform a case by case analysis of the maximum achievable control technology and meet the emissions limitation that could be achieved in practice by the best performing sources in that category. If the Supreme Court decides to hear the appeal, any required maximum achievable control technology analysis requirement will likely be stayed for the duration of the rehearing. Until the court or the EPA take further action, it is not known the extent to which future mercury rules may impact PacifiCorp's current plans to reduce mercury emissions at their coal-fired facilities.

PacifiCorp is committed to responding to environmental concerns and investing in higher levels of protection for its coal-fired plants. PacifiCorp and MEHC anticipate spending \$1.2 billion over a ten-year period to install necessary equipment under future emissions control scenarios to the extent that it's cost-effective.

## **CLIMATE CHANGE**

Climate change has emerged as an issue that requires attention from the energy sector, including utilities. Because of its contribution to United States and global carbon dioxide emissions, the U.S. electricity industry is expected to play a critical role in reducing greenhouse gas emissions. In addition, the electricity industry is composed of large stationary sources of emissions that are thought to be often easier and more cost-effective to control than from numerous smaller sources. PacifiCorp and parent company MidAmerican Energy Holdings Company recognize these issues and have taken voluntary actions to reduce their respective  $CO_2$  emission rates. PacifiCorp's efforts to achieve this goal include adding zero-emitting renewable resources to its

<sup>&</sup>lt;sup>7</sup> Refer to the memorandum from Robert Meyers, Deputy Assistant Administrator, Environmental Protection Agency, Office of Air and Radiation, dated January 7, 2009.