Exhibit No. ___ (Exh. EDH-3)
Dockets UE-190334/UG-190335/UE-190222
2019 Avista General Rate Case
Witness: Ezra D. Hausman, Ph.D.

BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION, **Complainant,** **v.** **AVISTA CORPORATION d/b/a AVISTA UTILITIES,** **Respondent.**	**DOCKETS UE-190334, UG-190335, and UE-190222** ***(Consolidated)***

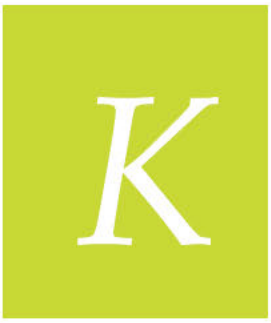
EXHIBIT EDH-3 TO THE

RESPONSE TESTIMONY OF

EZRA D. HAUSMAN, PH.D.

ON BEHALF OF SIERRA CLUB

October 3, 2019



2017 PSE Integrated Resource Plan

Colstrip

This appendix describes the Colstrip generating plant ownership structure, governance agreements and history. It explains plant operations, the technology employed to minimize environmental impacts, and summarizes the rules and regulations that may impact the plant's future operation. [12]

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(continued next page)

1 / Potential future CO_2 regulation is incorporated in the overall scenarios for the IRP since it impacts all thermal resources. Since Colstrip is included among these, CO_2 is not treated separately here.
2 / For discussion of the Colstrip sensitivities modeled in the 2017 IRP, see Chapter 6, Electric Analysis and Appendix N.

4. RECENT RULES & PROPOSED RULES K-14

- *Mercury and Air Toxics (MATS) Rule*
- *Regional Haze Rule*
- *Coal Combustion Residuals Rule*
- *Clean Air Act National Ambient Air Quality Standards (NAAQS)*

1. THE CHANGING LANDSCAPE

With six joint owners, Colstrip faces a changing landscape of evolving energy markets, new environmental regulation, potential carbon pricing, aging infrastructure, periodic litigation and potential owner valuation differences. As these factors influence Colstrip operations, PSE continually evaluates the asset, as we do all the assets within our portfolio.

As explained below, six partner companies own various shares of the Colstrip Plant. Talen Energy is one of PSE's partners in this ownership. Talen Energy and PSE each own 50 percent of Colstrip Units 1 & 2; Talen Energy also owns a 30 percent share of Unit 3. Talen Energy has experienced two significant corporate structure changes in recent years. In June 2015, Talen Energy was created from a restructuring of PPL Montana assets. Then in December 2016, Talen Energy was acquired by Riverstone Holdings, LLC, and Talen's Montana assets were moved to Talen Energy-MT as a subsidiary of Riverstone. For PSE, the recent change has created uncertainty concerning the future partnership viability for continued operations of Colstrip Units 1 & 2 and long-term planning for Colstrip Units 3 & 4.

Over the past few years, Colstrip has been the subject of litigation brought by the Sierra Club and Montana Environmental Information Center (MEIC) related to the Clean Air Act and by Earthjustice[3] and MEIC related to the plant wastewater ponds. As the Clean Air Act litigation trial date approached, the owners were also considering economic factors related to market conditions, such as low natural gas prices, compliance with recent environmental regulation related to carbon emissions (the Clean Power Plan) and environmental regulations that could necessitate further environmental equipment installation on Colstrip Units (Regional Haze Rule). Based on this analysis, the owners determined to set a retirement date for Colstrip 1 & 2.

Upon further discussion with Sierra Club and MEIC, the Clean Air Act litigation was settled by an agreement to shut down Colstrip 1 & 2 no later than July 1, 2022. Additionally, the legal action brought by Earthjustice and MEIC related to the plant's wastewater ponds was also settled by an agreement based on the retirement of Colstrip 1 & 2 and the commitment to transition to a dry disposal system for coal combustion residuals from Colstrip 3 & 4 no later than July 1, 2022.

3 / Earthjustice is a nonprofit that represents Sierra Club and other nonprofit environmental organizations on legal issues. It was formerly the Sierra Club Legal Defense Fund.

2. FACILITY DESCRIPTION

The Colstrip generating plant supplies PSE customers with efficient, baseload power. Currently the facility supplies 18 percent of the energy needed to serve PSE's energy needs on an annual basis. The plant consists of four coal-fired steam electric plant units located in eastern Montana about 120 miles east of Billings. It was built in two phases.

- Units 1 & 2 began operation in 1975 and 1976, respectively. Each produces up to 307 megawatts (MW) net. PSE and Talen Energy (formerly PPL Montana) each own a 50 percent undivided interest in both units.
- Units 3 & 4 began operation in 1984 and 1986, respectively. Each produces up to 740 MW net. Six companies participate in the ownership of Units 3 & 4. PSE owns 25 percent each of Units 3 & 4, Portland General Electric (PGE) owns 20 percent of both units, Avista owns 15 percent of both units and PacifiCorp owns 10 percent of both units. Talen Energy owns 30 percent of Unit 3 and NorthWestern Energy owns 30 percent of Unit 4.

Figure K-1 summarizes ownership of the Colstrip plant.

Figure K-1: Colstrip Ownership Share by Unit and Owner

Owner		Unit 1	Unit 2	Unit 3	Unit 4	Ownership Total, MW	% of Total Plant
Puget Sound Energy	% MW	50% 153.5	50% 153.5	25% 185	25% 185	677	32.3%
Talen Energy		50% 153.5	50% 153.5	30% 222		529	25.3%
NorthWestern Energy					30% 222	222	10.6%
PGE				20% 148	20% 148	296	14.1%
Avista				15% 111	15% 111	222	10.6%
PacifiCorp				10% 74	10% 74	148	7.1%
Total		307	307	740	740	2094	100.0%

The Colstrip Transmission System was built at the same time as Units 3 & 4. This transmission system consists of two single-circuit 500 kV transmission lines that run from the plant to an interconnection with the Bonneville Power Administration (BPA) in Townsend, Montana. It is owned by the five regulated utility owners of the power plant: PSE, NorthWestern Energy, PGE, Avista and PacifiCorp.

Governance

Colstrip owners are governed by two ownership agreements. The Units 1 & 2 Construction and Ownership Agreement executed in 1971, and the Colstrip Units 3 & 4 Ownership and Operation Agreement executed in 1981. There is a separate Operating and Maintenance Agreement for Units 1 & 2 and a separate Common Facilities Agreement.

Each agreement establishes an Owners Committee to guide operating decisions, and the agreements set forth several key conditions.

- Ownership is as "tenants in common," without a right of partition, and the obligations of each owner are several and not joint.
- Assignment and ownership transfer to third parties is limited, with a right of first refusal for an existing owner to acquire any ownership offered for sale.
- The term of the agreements continues for as long as the units are used and useful or to the end of the period permitted by law.
- Each owner must provide enough fuel to operate its share of the units at minimum load.
- Failing to pay its share of project costs or failing to provide adequate fuel constitutes a default on the part of the owner.
- An owner must continue to pay its share of operating costs and coal costs until it has transferred its ownership to another entity.
- No single owner has the ability or right to shut down the plant, so to shut down and decommission any unit, all owners of that unit must unanimously agree.
- The ownership contracts do not establish a "put" right for any owner.

The Ownership and Operation and Agreement for Units 3 & 4 (O&O Agreement) specifies a voting structure to be used by the Owners Committee for approving annual budgets and other operating decisions. Both ownership agreements provide that the Owners Committee may not amend the agreement.

The operating agreements provide for a plant operator. The original agreements named Montana Power and subsequently its successor Talen Energy as Operator of all four units at the plant. The units are managed for daily operational purposes as a single facility with common costs split per ownership share. On May 23, 2016, Talen provided the other owners official notice (required by the O&O Agreement for Units 3 & 4) to terminate its operation of the plant within two years. However, in June 2017 Talen withdrew its operator resignation announcement, and will continue to operate all four Colstrip units.

A separate agreement governs ownership and operation of the Colstrip Transmission System. NorthWestern Energy is the immediate downstream transmission provider.

History of Colstrip

The Northern Pacific Railway established the town of Colstrip in 1924 at the northern end of the Powder River Basin to provide coal for its steam locomotives. The Powder River Basin is the single largest source of coal in the United States and is one of the largest deposits of coal in the world. At Colstrip, coal is mined from the Rosebud seam of the Fort Union Formation. The railroad shut down the mine in 1958 when it switched to diesel locomotives, and the Montana Power Company purchased the rights to the mine and the town in 1959. They resumed mining operations in the 1970s with plans to build coal-fired electrical plants.

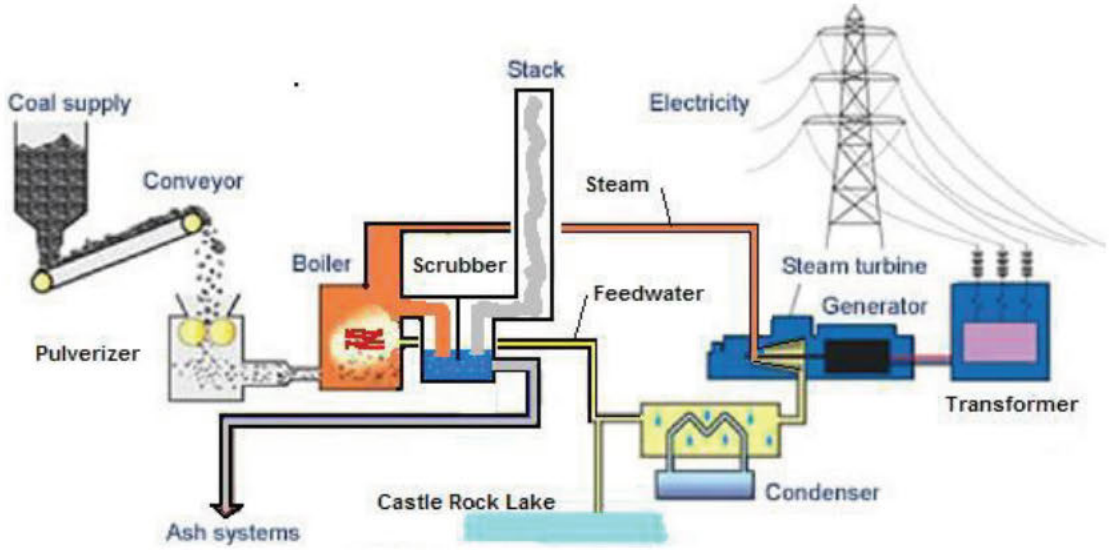
In the 1960s, BPA forecast that available baseload hydroelectric power would be fully subscribed by its statutory preference customers, leaving none available for sale to PSE and other investor-owned utilities. Faced with this situation, PSE had to develop or contract for other sources of baseload energy. Developing a coal-fired generating plant at Colstrip, Montana, was the result. The adjacent Rosebud mine offered plentiful coal reserves that could be delivered to the generating plant without the need for costly rail facilities. Sharing the ownership and output of a two-unit plant with Montana Power Company (whose generating plants were later acquired by Talen Energy) made construction and operation more economical, and sharing the output of two units increased reliability compared to owning a single unit of similar size or a larger single-unit plant.

In the early 1970s, under the same forecast that the region's investor-owned utilities would soon lose access to BPA baseload hydro power, PSE and Montana Power Company began planning for Units 3 & 4 together with three other utilities. Construction of the two units began, but delays in obtaining the required Montana Major Facility Siting Act Certificate postponed their opening until 1984 and 1986 respectively. The 500 kV Colstrip Transmission System was constructed in tandem with Units 3 & 4.

Plant Operations

Each of the four Colstrip units consists of a fuel supply system, a coal-fired boiler, a steam turbine-generator, a cooling tower, step-up transformers, piping, and electric distribution and auxiliary equipment. Figure K-2 provides a simplified illustration of how each unit generates electricity.

Figure K-2: Colstrip Plant Operations Diagram



How Colstrip Generates Electricity

Coal from the Rosebud Mine is crushed into 3-inch chunks and transported to the generating plant on overland conveyors or in trucks where it is stored in piles at the plant site before being moved to silos in the boiler buildings. Coal travels through a pulverizer that grinds it to the consistency of talcum powder. The pulverized coal is then mixed with air and blown into the boiler. Inside the boiler, the coal and air mixture burns, releasing hot gases that convert water in boiler tubes to steam. The steam powers turbines connected to electric generators, which transform the mechanical energy from the turbine into electric energy.

Afterwards, the hot gases are drawn into the scrubbers, where they are cleaned before being exhausted through the stack. Bottom ash, the heavier of the two residuals, sinks to the bottom of the boiler where it is collected for treatment and storage. The lighter fly ash is pulled into the scrubbers with the flue gases, where it is captured for treatment and storage. The scrubbers also capture sulfur and mercury emitted from the coal during combustion.

Water for plant operations comes from the Yellowstone River. A 30-day supply is maintained in Castle Rock Lake, a man-made lake constructed as part of the plant facilities. As water enters the plant it is divided into two streams. The largest flows to the cooling towers where it replaces water lost from evaporation, the smaller flow is used for various processes including equipment cooling and scrubber system make-up. Water used in the boilers is demineralized before entering a closed-loop system that passes through the boiler and turbine system.

Environmental Impact Measures

Nearly every step of the process includes measures to reduce environmental impacts.

NITROGEN OXIDES (NO_X). Coal and air leaving the pulverizers passes though burner systems and over-fire air systems that cool the flame temperature and reduce the formation of NO_X. Units 1 & 2 use a second-generation low-NO_X combustion system with a close-coupled over-fire air injection. The newer Units 3 & 4 use a third-generation combustion system with separated over-fire air injection. Digital control systems installed on all four units further enhance NO_X emissions control. SmartBurn – an optimized combustion system that helps decrease the amount of nitrogen oxides formed during the combustion process – was installed in 2015 to Unit 2, 2016 to Unit 4, and 2017 to Unit 3 to further reduce NO_X emissions.

MERCURY. Coal contains mercury. To oxidize the mercury and enhance its capture, the coal is treated with a bromine solution before entering the boiler. Then, flue gases are treated with powdered activated carbon to capture the mercury before the gases enter the scrubbers; there, the activated carbon and mercury are removed along with other particulate matter.

SULFUR DIOXIDE (SO_2). Permit specifications limit the amount of sulfur in the coal fuel. Additionally, all four units remove sulfur dioxide from flue gases using wet alkali scrubbers. These scrubbers use the alkalinity of fly ash and/or hydrated lime to capture SO_2; then a water spray collects the fly ash and the mercury for further processing.

COAL COMBUSTION RESIDUALS (CCR). Two types of ash are produced by coal combustion. Bottom ash makes up 30 percent to 35 percent of the total. Fly ash makes up the remainder. The larger and heavier bottom ash falls into a water-filled trough in the bottom of the boiler; from there it is pumped to settling ponds on the plant site to dewater and then to permanent storage ponds. Some bottom ash is used as a construction material.

The smaller and lighter fly ash and other particulate matter (PM) passes into the scrubbers with the flue gases. The scrubbers use the fly ash's alkalinity and/or hydrated lime to capture SO_2 gases, and a water spray removes the fly ash and other PM. The resulting scrubber slurry is piped to storage ponds. Before final placement in the storage ponds, paste plants remove most of the water; the paste, which begins the process at about 65 percent solids, sets up like low-grade concrete after several days.

The original ash holding ponds at Colstrip were designed with highly impermeable clay liners to prevent slurry components from seeping into the groundwater. These conformed to the requirements of the Montana Major Facility Siting Act Certificate. Monitoring wells, installed prior to the start of operations, monitor the groundwater for any sign of possible contamination (pond water seepage), and capture wells pump impacted ground water back to the ponds.

Since 2000, projects have been and are being completed to control ash pond leakage, reduce migration of affected groundwater and to upgrade plant wastewater systems to allow increased recycling of water. In 2015, Colstrip completed a comprehensive master plan to address water and waste management at the facility to meet requirements under the CCR Rule and AOC. The plan covers a 25-year horizon and includes water reduction, treatment, water reuse, pond closures, post closure site monitoring and remediation.

ASH HOLDING POND SEEPAGE. Several years after the first slurry was placed into the stage one pond for Units 1 & 2 some of the monitoring wells began to show increases in groundwater constituents, such as dissolved salts, which could indicate that some of the ash constituents were migrating through the clay lining. In consultation with MDEQ (the Montana Department of Environmental Quality), Colstrip plant operators installed capture wells to capture affected groundwater and pump it back to the ponds to prevent affected water from leaving plant property, as well as additional monitoring wells. In addition to capture wells, existing ponds have been continually modified and additional storage cells have been installed over time utilizing newer, state-of-the-art lining methods including polymer liners, geo membranes and leak detection/collection systems.

Coal Supply Agreements (CSAs)

The coal supply for Colstrip Units 1 & 2 and Units 3 & 4 is established between the Colstrip Units 1 & 2 owners (buyers of coal) and Westmoreland Mining Co., and between Colstrip Units 3 & 4 owners (buyers of coal) and the Westmoreland Mining Co. The Units 1 & 2 agreement is titled "Coal Purchase and Sale Agreement," and its term began January 1, 2010. PSE currently plans to purchase coal for Units 1 & 2 until July 1, 2022. For Units 3 & 4, the agreement is titled "Amended and Restated Coal Supply Agreement"; its term began January 1, 1998, and continues currently. PSE is currently in negotiations with the other Units 3 & 4 coal buyers and Westmoreland Mining Co. to extend the Units 3 & 4 coal purchase agreement.

The specific content of the CSAs is protected under contractual confidentiality language embedded within the agreement. However, in general terms the topics covered in the agreements are: sale and purchase of coal; dedication of coal reserves, and term; governance of the agreement; establishment of executive committee and mine operating committee; annual operating plan (mining plan); coal delivery, weighing and transportation; coal quality; coal price and payments; and final reclamation costs and obligations.

Requirements after Operations Cease

Potential Plant Demolition Obligations

The ownership agreements for both Units 1 & 2 and Units 3 & 4 are silent about a definite date for shutdown of the units. They address decommissioning or remediation costs only to the extent that costs remaining after equipment salvage are to be distributed based on ownership share. Currently there are no plans for decommissioning of the facility. The Montana legislature passed a bill in 2017 to require submission of a retirement plan.

Potential Mine Reclamation and Obligations

Colstrip receives its fuel from Westmoreland Mining Co., also located in Colstrip, Montana. Mining permits held by Westmoreland require development of reclamation plans and cost estimates for all areas disturbed by mining, and Westmoreland has provided surety bonds to the State of Montana to ensure that reclamation will occur. Plant owners reimburse Westmoreland for the cost of mine reclamation, including final reclamation work after coal deliveries cease, as part of the current costs paid for each ton of coal supplied.

AOC Wastewater Remediation Obligations

On August 3, 2012, Talen Energy and the Montana Department of Environmental Quality signed an Administrative Order of Consent Regarding Impacts from Wastewater Facilities (AOC). The AOC sets up a comprehensive program for investigation, interim response and remediation of any wastewater seepage or spills, and for closure of the holding ponds. Plans for closure of the wastewater ponds were submitted to the Montana Department of Environmental Quality in 2017. This plan will include requirements for wastewater pond closure which must be completed when plant operations cease. Refer to the section below titled "Recent Consent Decrees" for additional information on the AOC.

Coal Combustion Residuals (CCR) Pond Closure and Related Remediation Obligations

On April 17, 2015, the United States Environmental Protection Agency (EPA) published a final rule, effective October 19, 2015, that regulates Coal Combustion Residuals (CCRs) under the Resource Conservation and Recovery Act, Subtitle D. The rule was initially self-implementing, but Congress passed a new statute in late 2016 authorizing EPA to either directly implement the CCR rule or allow states to implement the CCR Rule through state permit programs. The rule includes comprehensive requirements for closure of CCR wastewater ponds, as well as corrective action to remediate any impacts from CCR ponds. Refer to the section below titled "Rules and Proposed Rules" for additional information regarding the CCR rule.

3. RECENT CONSENT DECREES

Administrative Order on Consent for Wastewater Ponds

On August 3, 2012, Talen Energy and the Montana Department of Environmental Quality signed an Administrative Order of Consent Regarding Impacts from Wastewater Facilities (the AOC). The AOC sets up a comprehensive program for investigation, interim response and remediation of any wastewater seepage or spills, and closure of the holding ponds. For any area of the plant identified as a site where seepage or spills have occurred, the AOC provides for preparation of a Site Report. The Site Report must include a description of investigations performed to date in that area, results of modeling, details of pond construction and recommendations for additional characterization. After the Site Report for a given area is complete, a Site Characterization Work Plan, a Cleanup Criteria and Risk Assessment, a Remedy Evaluation Report, and if required, a Final Remediation Action Report will be completed and approved by the MDEQ. The AOC provides for public notice and comment on each report, and for response by MDEQ to substantive comments. Plans for closure of the wastewater ponds were submitted to the Montana Department of Environmental Quality in 2017. The plans include requirements for wastewater pond closure which must be completed when operations cease.

Consent Decree Related to AOC Litigation

In Fall 2012, two lawsuits were filed in Montana state court by the Montana Environmental Information Center and Earthjustice against the Montana Department of Environmental Quality pertaining to the Administrative Order on Consent Regarding Impacts Related to Wastewater Facilities entered into with PPL Montana, LLC (now Talen Montana), the plant operator. This litigation included a mandamus action and a petition for review. The petition for review was originally filed with Montana Board of Environmental Review, alleging that the Administrative Order on Consent Regarding Impacts Related to Wastewater Facilities is an improper enforcement action and violates Montanans' constitutional right to a clean and healthful environment. The Montana Department of Environmental Quality was the original defendant, but the operator of the Colstrip Steam Electric Generating Station intervened and removed the petition for review to Montana state court. Meanwhile, the mandamus action was dismissed in 2013.

The parties entered into settlement discussions and lodged a consent decree in state court in September 2016. Earthjustice and MEIC withdrew their claims in exchange for an agreement based on the retirement of Colstrip 1 & 2 and the commitment to transition to a dry disposal system for coal combustion residuals from Colstrip 3 & 4 no later than July 1, 2022.

Consent Decree Related to New Source Review/Prevention of Significant Deterioration Litigation

The Sierra Club and Montana Environmental Information Center filed a lawsuit in federal district court on March 6, 2013, alleging that the Colstrip Steam Electric Generating Station had violated the Clean Air Act by undertaking major repairs without a permit that would have required the installation of best available pollution control technology. Several amended complaints were filed, and at one point, plaintiffs alleged that 73 projects undertaken at the Colstrip Steam Electric Generating Station facility violated the Clean Air Act. Through amendment of the complaint and favorable court decisions, the number of claims was greatly reduced. Ultimately, claims related to two projects (one at Colstrip Unit 1 and one at Colstrip Unit 3) were set for trial in May 2016.

The parties entered into settlement discussions prior to the trial, and in July 2016, they entered into a consent decree which was filed in federal court. Under that decree Sierra Club and MEIC dropped all claims, and Colstrip Unit 1 & 2 owners agreed to cease operations of Units 1 & 2 no later than July 1, 2022. The owners also agreed to meet more stringent SO_2 and NO_x limits for Units 1 & 2 until closure in 2022.

4. RECENT RULES AND PROPOSED RULES

Mercury and Air Toxics (MATS) Rule

The EPA published the final Mercury and Air Toxics Standard to reduce air pollution from coal- and oil-fired power plants with a capacity equal to or greater than 25 megawatts in February 2012. The MATS rule establishes emissions limitations at coal-fired power plants for mercury (1.2 lbs per trillion British thermal units), and for acid gases and certain toxic heavy metals using a particulate matter surrogate (0.03 lb per million British thermal units [MMBtu)]. Coal-fired generating units had until April 2015 to comply with MATS, and they could receive up to a one-year extension from state permitting authorities for the installation of controls if necessary.

On June 29, 2015, the United States Supreme Court held that the EPA failed to consider costs when deciding whether it was "appropriate and necessary" to regulate emissions of mercury and other hazardous air pollutants from power plants. The Supreme Court's decision overturned a 2014 ruling by the U.S. Court of Appeals for the District of Columbia Circuit (D.C. Circuit), which held that EPA's decision not to consider costs in the initial stages of the MATS rulemaking process was reasonable. The Supreme Court remanded the decision on MATS back to the D.C. Circuit for further proceedings, so the full impact is not yet known.

The D.C. Circuit can either remand or vacate EPA's decision. Under a remand, the MATS rule would remain in effect while EPA addresses the deficiencies outlined by the Supreme Court. If the court vacated the rule, EPA would have to start the entire rulemaking process over again. EPA and environmental groups have already signaled their intent to argue for remand. The D.C. Circuit's decision is not expected for at least ten months, though industry petitioners may request expedited consideration.

The rule remains in effect while EPA addresses the deficiencies, but MDEQ granted Colstrip a one-year compliance extension until April 2016. Some investments for additional PM control by the Unit 1 & 2 scrubbers were required to comply with the heavy metals requirements of the MATS Rule. Installation of this equipment (sieve trays) on Units 1 & 2 scrubbers began in the second quarter of 2014 and was completed in the second quarter of 2016. This project brought Units 1 & 2 into compliance with the PM requirements of the MATS Rule. The Unit 3 & 4 scrubbers were already effective at keeping those units in compliance.

The mercury control system installed at Colstrip to meet a previous Montana mercury rule also meets the MATS requirements for mercury capture and removal. The existing scrubbers on all four units adequately remove acid gases covered by the rule. For more information on the MATS Rule, see http://www.epa.gov/mats/actions.html.

Regional Haze Rule

Established in 1999, the Regional Haze Program is a long-term (64-year) program administered by the U.S. EPA under federal law to improve visibility, or visual air quality, in 156 national parks and wilderness areas across the country. Specifically, the program requires EPA and the states to achieve natural-level visibility in all of the Class I areas in the country. Regional haze is not a health-based rule, rather it requires states to constantly decrease haze in certain scenic areas of the country over time according to a "Glide Path" in order to eliminate man-made impairment by 2064.

Every five years the Regional Haze Rule requires an updated progress report to show "reasonable progress" toward eliminating haze, and every ten years it requires a comprehensive updated plan for emission controls to keep emissions below the state's established Glide Path. States can take on regional haze analysis directly and develop a State Implementation Plan (SIP), or states can defer to EPA to establish a Federal Implementation Plan (FIP) for their state. In 2006, Montana deferred to EPA to develop the FIP for the first ten-year phase of the program, 2008-2018.

Under Montana's FIP, established in August 2012, EPA determined that Colstrip emissions impact at least two Class I areas within 300 kilometers, including the Theodore Roosevelt National Park and UL Bend National Wildlife Refuge. As a result, EPA determined that Colstrip Units 1 & 2 required additional emissions controls to meet additional sulfur dioxide and nitrogen oxide limits under the Regional Haze Rule. EPA determined that Colstrip 3 & 4 were exempt from requirements under the first ten-year phase. The Sierra Club filed an appeal of EPA's FIP with the United States Court of Appeals for the Ninth Circuit (the Ninth Circuit) on November 15, 2012, and Talen Energy also filed an appeal as the Colstrip operator. The case was heard in 2014 and a final decision was issued by the Ninth Circuit on June 9, 2015, which determined that EPA had not adequately justified the need for two of the control technologies and remanded these two issues back to EPA for a re-do. EPA informally indicated that it will wait until the next Regional Haze review period to reissue an FIP. In July 2016, EPA proposed to delay the start of the new Regional Haze review from 2018 to 2021.

The ruling in no way affects the future planning periods for the Regional Haze Program or Montana's Glide Path. EPA's current assessment of Montana's Glide Path will require significant emission reductions to meet the natural visibility goal by 2064. Thus, additional emission reductions from current levels will be necessary in future ten-year planning periods beginning in the second planning period, which was set by the EPA in 2017 to begin July 31, 2021. The rule is subject to challenge in the D.C. Circuit at the moment, but no briefing schedule has been set.

Coal Combustion Residuals Rule

On April 17, 2015, the EPA published a final rule, effective October 19, 2015, that regulates coal combustion residuals (CCRs) under the Resource Conservation and Recovery Act, Subtitle D. The CCR rule addresses the risks from coal ash disposal (such as the leaking of contaminants into ground water, the blowing of contaminants into the air as dust and the catastrophic failure of coal ash containment structures) by establishing technical design, operation and maintenance, closure and post-closure care requirements for CCR landfills and surface impoundments, and corrective action requirements for any related leakage. The rule also sets out recordkeeping and reporting requirements including posting specific information related to CCR surface impoundments and landfills to a publicly-accessible website.

See http://www2.epa.gov/coalash/coal-ash-rule, and
http://www.gpo.gov/fdsys/pkg/FR-2015-04-17/pdf/2015-00257.pdf.

Clean Air Act National Ambient Air Quality Standards (NAAQS)

Two types of national air quality standards are established by the Clean Air Act. Primary standards set limits to protect public health, including the health of "sensitive" populations such as asthmatics, children and the elderly. Secondary standards set limits to protect public welfare, including protection against visibility impairment, damage to animals, crops, vegetation and buildings. These ambient level standards apply uniformly throughout the states. The Clean Air Act required EPA to set NAAQS for widespread pollutants from numerous and diverse sources considered harmful to public health and the environment. EPA has set NAAQS for six "criteria" pollutants; periodic review of the standards and the science on which they are based is required. Each time the NAAQS are revised, the states must evaluate whether any parts of the state exceed the standard (these are “non-attainment” areas). If a state contains any non-attainment areas, it must propose a plan and schedule to reduce emissions in order to achieve attainment approval by the EPA. Currently the Colstrip area of Montana is in attainment for all criteria pollutants. Reductions in Colstrip emissions for SO_2, NO_X and PM to meet the MATS Rule and the EPA FIP are expected to keep the area in attainment with any NAAQS revisions with no further actions required. For more information, go to http://www.epa.gov/ttn/naaqs/criteria.html.