

On September 8, 2011, Sevier Power Company (SPC) submitted a NOI to construct and operate a 580 MW, combined-cycle, natural gas-fired power plant located near Sigurd, Utah; an attainment area for all criteria pollutants. In response to a request for additional information, SPC submitted a revision to its NOI on January 19, 2012. As proposed in this revised NOI, the plant will consist of two natural gas-fired, combustion turbines (CT); two, natural gas duct-fired, heat recovery steam generators (HRSG); a natural gas-fired auxiliary boiler; diesel emergency generator; and other associated equipment. The CT/HRSG units are dry low-NO<sub>x</sub> units controlled with both selective catalytic reduction (SCR) and oxidation catalysts (oxy-cat). The auxiliary boiler shall be equipped with ultra-low-NO<sub>x</sub> burners (ULNB) and flue gas recirculation (FGR). The SPC power plant shall be subject to the provisions of 40 CFR 60 Subparts A, Dc, III and KKKK; and 40 CFR 63 Subparts A and ZZZZ. The proposed source emissions are estimated at the following tpy values: PM<sub>10</sub> 106, PM<sub>2.5</sub> (a subset of PM<sub>10</sub>) 106, NO<sub>x</sub> 168.3, SO<sub>2</sub> 25.7, CO 577, VOC 91.6, combined HAPs 8.5, and GHG 2,019,226.1 (expressed as CO<sub>2</sub>e).

This source is a new major source under PSD. The proposed emissions of NO<sub>x</sub>, PM<sub>10</sub> and PM<sub>2.5</sub> exceed the emission thresholds outlined in R307-406-5 and R307-410-4, and so an air quality impact analysis (AQIA) of the proposed project's impact on federal air quality standards and air quality related values is required. The results of that analysis are as follows:

#### Model Predicted NAAQS Concentrations

Air Pollutant	Prediction (µg/m <sup>3</sup> )	Percent NAAQS
NO <sub>2</sub> 1-hour	158	84
NO <sub>2</sub> Annual	31	31
PM <sub>10</sub> 24-hour	79	53
PM <sub>2.5</sub> 24-hour	23	66
PM <sub>2.5</sub> Annual	14.8	98
CO 1-hour	5141	12
CO 8-hour	3291	33

#### Model Predicted PSD Class I Increment Concentrations

National Park	Prediction	Class I SIL (significant impact level)
<b>Capitol Reef</b>		
NO <sub>2</sub> Annual	0.0001	0.1
SO <sub>2</sub> 3-Hour	0.0039	1
SO <sub>2</sub> 24-Hour	0.0013	0.2
SO <sub>2</sub> Annual	0.0001	0.1
PM <sub>10</sub> 24-Hour	0.0314	0.3
PM <sub>10</sub> Annual	0.0013	0.2
<b>Arches</b>		
NO <sub>2</sub> Annual	0.0001	0.1
SO <sub>2</sub> 3-Hour	0.0023	1
SO <sub>2</sub> 24-Hour	0.0011	0.2
SO <sub>2</sub> Annual	0.0001	0.1
PM <sub>10</sub> 24-Hour	0.0217	0.3
PM <sub>10</sub> Annual	0.0011	0.2

#### Canyonlands

NO <sub>2</sub> Annual	0.0001	0.1
SO <sub>2</sub> 3-Hour	0.0038	1
SO <sub>2</sub> 24-Hour	0.0013	0.2
SO <sub>2</sub> Annual	0.0001	0.1
PM <sub>10</sub> 24-Hour	0.0276	0.3
PM <sub>10</sub> Annual	0.0013	0.2

Bryce Canyon

NO <sub>2</sub> Annual	0	0.1
SO <sub>2</sub> 3-Hour	0.0013	1
SO <sub>2</sub> 24-Hour	0.0006	0.2
SO <sub>2</sub> Annual	0	0.1
PM <sub>10</sub> 24-Hour	0.0144	0.3
PM <sub>10</sub> Annual	0.0004	0.2

Zion

NO <sub>2</sub> Annual	0	0.1
SO <sub>2</sub> 3-Hour	0.0015	1
SO <sub>2</sub> 24-Hour	0.0007	0.2
SO <sub>2</sub> Annual	0	0.1
PM <sub>10</sub> 24-Hour	0.0108	0.3
PM <sub>10</sub> Annual	0.0002	0.2

Model Predicted PSD Class II Increment Concentrations

Air Pollutant	Prediction (µg/m <sup>3</sup> )	Percent PSD
NO <sub>2</sub> Annual	8	32
PM <sub>10</sub> 24-hour	7	23
PM <sub>2.5</sub> 24-hour	6.9	77
PM <sub>2.5</sub> Annual	1.8	45

The ITA proposes limitations on emissions as follows:

CT/HRSG Units

Pollutant	Limit	Averaging Time
PM <sub>10</sub> /PM <sub>2.5</sub>	14 lb/hr	30-day rolling average
NO <sub>x</sub>	2.0 ppm <sub>dv</sub> @ 15% O <sub>2</sub>	3-hour average
CO	3.0 ppm <sub>dv</sub> @ 15% O <sub>2</sub>	3-hour average
VOC	3.0 ppm <sub>dv</sub> @ 15% O <sub>2</sub>	3-hour average
SO <sub>2</sub> /H <sub>2</sub> SO <sub>4</sub>	3.4 lb/hr	30-day rolling average

Auxiliary Boiler

Pollutant	Limit	Averaging Time
PM <sub>10</sub> /PM <sub>2.5</sub>	0.01 lb/MMBtu	30-day rolling average
NO <sub>x</sub>	0.017 lb/MMBtu (1.45 lb/hr)	3-hour average
CO	0.0375 lb/MMBtu	3-hour average