STATE OF NEVADA DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES DIVISION OF ENVIRONMENTAL PROTECTION – BUREAU OF AIR POLLUTION CONTROL

Director's Review and Preliminary Determination of Permit Issuance for

ORNI 32 LLC Dixie Meadows Geothermal Churchill County, Nevada August 6, 2021

ORNI 32 LLC (ORNI 32) submitted an application for a new Class II Air Quality Operating Permit, AP4911-4346, FIN A2281, for the Dixie Meadows Geothermal facility in Churchill County, Nevada. The project is located approximately 43 miles northeast of Fallon in Churchill County, NV, in all or portions of Section 8, Township 22 N, Range 35 E, M.D.B.&M.

The Dixie Meadows Geothermal Development Project in Dixie Valley, Nevada will consist of one 19.22 MW geothermal power plant. The facility will also employ a 490 HP emergency generator.

The Nevada Division of Environmental Protection – Bureau of Air Pollution Control (BAPC) has reviewed the application for the above-referenced operating permit, and has made a preliminary determination to issue the operating permit. The facility-wide Potential to Emit (PTE), including emissions from Non-Permit equipment are given in the table below.

	Dixie Meadows Geothermal Potential to Emit (PTE)		
Current emissions estimates indicate ORNI 32 is a <i>Class</i> <i>II source</i> , because the facility-wide PTE for any individual regulated pollutant is <i>less</i> than 100 tons per year.	Pollutant		New (tons/year)
	РМ	Particulate Matter	0.0077
	PM10	Particulate Matter ≤ 10 microns in diameter	0.0077
	PM2.5	Particulate Matter \leq 2.5 microns in diameter	0.0077
	SO ₂	Sulfur Dioxide	0.051
	NOx	Oxides of Nitrogen	0.15
	СО	Carbon Monoxide	0.14
	VOC	Volatile Organic Compounds	30.2
	Pb	Lead	0.00
	HAP (single)	Hazardous Air Pollutants	0.00021
	HAPs (all)	Hazardous Air Pollutants	0.00067

The project is located in Air Quality Hydrographic Area (HA) 128 of the Dixie Valley. HA 128 is not a triggered basin for an increment anlaysis. ORNI 32 will be subject to NSPS – 40 CFR Part 60 Subpart IIII – for Standards of Performance for Stationary Compression Ignition Internal Combustion Engines and NESHAP – 40 CFR Part 63 Subpart ZZZZ – for Stationary Reciprocating Internal Combustion Engines.

Air dispersion modeling conducted by the applicant and the Nevada Division of Environmental Protection – Bureau of Air Quality Planning (BAQP) demonstrates that continued operation of ORNI 32, will not violate any air quality standard.

ORNI 32 must comply with all State and Federal air quality requirements and all conditions established within the proposed draft Class II Air Quality Operating Permit.