

# Prairie Island Nuclear Generating Plant December 2019

## INDEPENDENT SPENT FUEL STORAGE INSTALLATION

### Introduction

This report provides data on radiation levels inside the Xcel Energy, Inc. Independent Spent Fuel Storage Installation (ISFSI) at the Prairie Island Nuclear Generating Plant (PINGP) for December 2019. The data contained in this report were gathered in accordance with agreements between Xcel Energy, Inc. and the Minnesota Department of Health (MDH).

At the end of December 2019, 44 casks were storing spent fuel inside the Independent Spent Fuel Storage Installation. The last cask to be moved to the Independent Spent Fuel Storage Installation was placed on May 25, 2018.

### Radiation Monitoring

MDH monitored radiation levels around the ISFSI from January 1995 to July 2015 using Pressurized Ionization Chambers (PICs). The PICs were located on the north and south end of the ISFSI. The PICs were replaced with new monitors that use a dual Geiger-Mueller (GM) tube system (a high range and low range GM tube). The new monitors are located in the same locations as the PICs. The new monitors were connected on September 30, 2015 and began logging data on October 20, 2015. The monitors average radiation level data over a 15 minute period and report that average value. This report contains the daily high and low of those readings as well as the average of those readings for each monitor.

### Analysis and Comments

Monitor 1 readings ranged from 0.139 mR/hr to 0.173 mR/hr. Monitor 2 readings ranged from 0.147 mR/hr to 0.190 mR/hr. Monitor 2 lost contact on December 13, 2019 sometime after 11:04 am, due to equipment being switched out. Contact was reestablished and resumed logging data on December 13, 2019 sometime before 12:04 pm. Monitor 2 lost contact a few times between December 29, 2019 and December 31, 2019. MDH determined there was a computer glitch that was corrected, and normal logging resumed December 31, 2019 sometime after 6:13 am.

Additional monitoring data on radioactivity levels in other media (air, for example) are available in the annual Minnesota Department of Health "Environmental Radiation Data Report."

For more information, go to: [Environmental Monitoring](https://www.health.state.mn.us/communities/environment/radiation/monitor/index.html)  
(<https://www.health.state.mn.us/communities/environment/radiation/monitor/index.html>)

Minnesota Department of Health  
Radioactive Materials Unit  
[health.ram@state.mn.us](mailto:health.ram@state.mn.us)  
[www.health.state.mn.us](http://www.health.state.mn.us)

01/17/2019

*To obtain this information in a different format, call: 651-201-4000.*

**Table 1: December 2019 Data Report for Monitor 1**

Date	Maximum Reading (mR/hr)	Minimum Reading (mR/hr)	Average Reading (mR/hr)
12/1/19	0.163	0.143	0.151
12/2/19	0.164	0.143	0.151
12/3/19	0.161	0.142	0.151
12/4/19	0.163	0.143	0.151
12/5/19	0.164	0.143	0.150
12/6/19	0.165	0.144	0.150
12/7/19	0.159	0.142	0.149
12/8/19	0.161	0.144	0.151
12/9/19	0.162	0.142	0.151
12/10/19	0.163	0.143	0.152
12/11/19	0.160	0.142	0.151
12/12/19	0.164	0.144	0.151
12/13/19	0.166	0.143	0.151
12/14/19	0.171	0.143	0.151
12/15/19	0.163	0.143	0.152
12/16/19	0.160	0.139	0.150
12/17/19	0.164	0.142	0.151
12/18/19	0.163	0.141	0.150
12/19/19	0.173	0.142	0.150
12/20/19	0.161	0.144	0.150
12/21/19	0.159	0.141	0.151
12/22/19	0.161	0.141	0.150
12/23/19	0.160	0.141	0.150
12/24/19	0.170	0.141	0.151
12/25/19	0.164	0.143	0.152
12/26/19	0.166	0.142	0.150
12/27/19	0.158	0.142	0.149
12/28/19	0.161	0.139	0.152
12/29/19	0.167	0.142	0.152
12/30/19	0.162	0.143	0.151
12/31/19	0.159	0.143	0.150

**Table 2: December 2019 Data Report for Monitor 2**

Date	Maximum Reading (mR/hr)	Minimum Reading (mR/hr)	Average Reading (mR/hr)
12/1/19	0.173	0.150	0.159
12/2/19	0.173	0.148	0.159
12/3/19	0.167	0.150	0.160
12/4/19	0.176	0.151	0.160
12/5/19	0.176	0.153	0.160
12/6/19	0.171	0.151	0.159
12/7/19	0.171	0.148	0.159
12/8/19	0.172	0.151	0.160
12/9/19	0.171	0.152	0.161
12/10/19	0.168	0.150	0.159
12/11/19	0.169	0.150	0.158
12/12/19	0.174	0.147	0.159
12/13/19	0.180	0.000	0.162
12/14/19	0.183	0.160	0.169
12/15/19	0.181	0.158	0.168
12/16/19	0.180	0.158	0.169
12/17/19	0.178	0.160	0.168
12/18/19	0.178	0.157	0.167
12/19/19	0.185	0.160	0.168
12/20/19	0.178	0.157	0.168
12/21/19	0.183	0.159	0.169
12/22/19	0.181	0.161	0.168
12/23/19	0.179	0.162	0.170
12/24/19	0.184	0.161	0.169
12/25/19	0.183	0.160	0.169
12/26/19	0.181	0.159	0.168
12/27/19	0.185	0.159	0.168
12/28/19	0.190	0.163	0.171
12/29/19	0.181	0.000	0.165
12/30/19	0.187	0.000	0.105
12/31/19	0.181	0.000	0.128