

Prairie Island Nuclear Generating Plant December 2021

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 2021. 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 2021, 47 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 28, 2020.

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 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 0.150 mR/hr to 0.185 mR/hr. Monitor 2 readings ranged from 0.132 mR/hr to 0.170 mR/hr.

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)
[\(https://www.health.state.mn.us/communities/environment/radiation/monitor/index.html\)](https://www.health.state.mn.us/communities/environment/radiation/monitor/index.html)

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

Table 1: December 2021 Data Report for Monitor 1

Date	Maximum Reading (mR/hr)	Minimum Reading (mR/hr)	Average Reading (mR/hr)
12/1/21	0.175	0.152	0.164
12/2/21	0.175	0.152	0.163
12/3/21	0.173	0.153	0.162
12/4/21	0.172	0.152	0.161
12/5/21	0.175	0.155	0.162
12/6/21	0.175	0.150	0.160
12/7/21	0.179	0.153	0.162
12/8/21	0.173	0.153	0.162
12/9/21	0.174	0.153	0.165
12/10/21	0.178	0.154	0.166
12/11/21	0.178	0.157	0.166
12/12/21	0.180	0.154	0.165
12/13/21	0.179	0.154	0.164
12/14/21	0.175	0.155	0.165
12/15/21	0.179	0.156	0.167
12/16/21	0.182	0.151	0.163
12/17/21	0.173	0.153	0.161
12/18/21	0.173	0.150	0.161
12/19/21	0.175	0.155	0.162
12/20/21	0.177	0.152	0.162
12/21/21	0.174	0.153	0.162
12/22/21	0.174	0.153	0.161
12/23/21	0.178	0.154	0.163
12/24/21	0.173	0.153	0.164
12/25/21	0.185	0.151	0.163
12/26/21	0.176	0.154	0.162
12/27/21	0.175	0.156	0.165
12/28/21	0.172	0.154	0.163
12/29/21	0.179	0.154	0.162
12/30/21	0.176	0.154	0.164
12/31/21	0.181	0.156	0.165

Table 2: December 2021 Data Report for Monitor 2

Date	Maximum Reading (mR/hr)	Minimum Reading (mR/hr)	Average Reading (mR/hr)
12/1/21	0.158	0.136	0.143
12/2/21	0.157	0.135	0.143
12/3/21	0.155	0.134	0.141
12/4/21	0.157	0.134	0.141
12/5/21	0.161	0.134	0.142
12/6/21	0.153	0.133	0.140
12/7/21	0.157	0.133	0.141
12/8/21	0.155	0.133	0.142
12/9/21	0.162	0.134	0.144
12/10/21	0.158	0.135	0.145
12/11/21	0.158	0.138	0.144
12/12/21	0.155	0.134	0.144
12/13/21	0.159	0.136	0.144
12/14/21	0.159	0.134	0.144
12/15/21	0.156	0.136	0.145
12/16/21	0.154	0.133	0.141
12/17/21	0.152	0.133	0.140
12/18/21	0.152	0.133	0.141
12/19/21	0.155	0.132	0.141
12/20/21	0.149	0.133	0.141
12/21/21	0.158	0.132	0.141
12/22/21	0.149	0.133	0.141
12/23/21	0.160	0.135	0.143
12/24/21	0.154	0.136	0.143
12/25/21	0.170	0.133	0.141
12/26/21	0.150	0.135	0.141
12/27/21	0.158	0.136	0.144
12/28/21	0.154	0.135	0.143
12/29/21	0.164	0.135	0.142
12/30/21	0.154	0.133	0.143
12/31/21	0.157	0.134	0.143