

Prairie Island Nuclear Generating Plant December 2022

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 2022. 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 2022, 50 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 June 30, 2022.

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 0.138 mR/hr to 0.194 mR/hr. Monitor 2 readings ranged from 0.134 mR/hr to 0.169 mR/hr. Monitor 1 and 2 lost contact on December 7, 2022, sometime after 6:54 am. Contact was reestablished and resumed logging data on December 7, 2022, sometime before 9:35 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>)

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To obtain this information in a different format, call: 651-201-4400.

Table 1: December 2022 Data Report for Monitor 1

Date	Maximum Reading (mR/hr)	Minimum Reading (mR/hr)	Average Reading (mR/hr)
12/1/22	0.194	0.145	0.154
12/2/22	0.166	0.144	0.154
12/3/22	0.180	0.145	0.156
12/4/22	0.168	0.144	0.154
12/5/22	0.164	0.144	0.153
12/6/22	0.174	0.146	0.155
12/7/22	0.167	0.000	0.153
12/8/22	0.173	0.143	0.156
12/9/22	0.180	0.148	0.160
12/10/22	0.178	0.146	0.160
12/11/22	0.161	0.143	0.153
12/12/22	0.170	0.147	0.154
12/13/22	0.169	0.143	0.153
12/14/22	0.170	0.146	0.155
12/15/22	0.169	0.145	0.156
12/16/22	0.183	0.147	0.156
12/17/22	0.169	0.145	0.154
12/18/22	0.182	0.145	0.155
12/19/22	0.172	0.144	0.152
12/20/22	0.174	0.139	0.151
12/21/22	0.162	0.141	0.152
12/22/22	0.180	0.138	0.153
12/23/22	0.179	0.140	0.151
12/24/22	0.184	0.140	0.149
12/25/22	0.179	0.138	0.149
12/26/22	0.167	0.140	0.149
12/27/22	0.174	0.139	0.149
12/28/22	0.162	0.140	0.150
12/29/22	0.160	0.141	0.150
12/30/22	0.165	0.142	0.150
12/31/22	0.160	0.141	0.149

Table 2: December 2022 Data Report for Monitor 2

Date	Maximum Reading (mR/hr)	Minimum Reading (mR/hr)	Average Reading (mR/hr)
12/1/22	0.161	0.140	0.147
12/2/22	0.157	0.139	0.148
12/3/22	0.166	0.138	0.146
12/4/22	0.159	0.140	0.147
12/5/22	0.154	0.139	0.147
12/6/22	0.161	0.141	0.146
12/7/22	0.161	0.000	0.145
12/8/22	0.159	0.137	0.146
12/9/22	0.155	0.139	0.147
12/10/22	0.156	0.141	0.147
12/11/22	0.157	0.140	0.147
12/12/22	0.164	0.139	0.147
12/13/22	0.161	0.140	0.148
12/14/22	0.166	0.137	0.147
12/15/22	0.163	0.143	0.151
12/16/22	0.160	0.139	0.149
12/17/22	0.158	0.140	0.147
12/18/22	0.156	0.138	0.145
12/19/22	0.152	0.136	0.144
12/20/22	0.154	0.134	0.144
12/21/22	0.149	0.137	0.144
12/22/22	0.169	0.135	0.143
12/23/22	0.154	0.136	0.143
12/24/22	0.156	0.135	0.144
12/25/22	0.149	0.135	0.143
12/26/22	0.163	0.137	0.143
12/27/22	0.159	0.136	0.145
12/28/22	0.159	0.137	0.146
12/29/22	0.156	0.139	0.146
12/30/22	0.159	0.138	0.145
12/31/22	0.156	0.138	0.146