

FY 2022 Reliability Summary

Data through Run 2022-2

	Unavailability	Unavailability	Number	Mean Time	Faults Per		
FY 2022 Actual	Percent	Hours	of Faults	to Beam Loss	Day		
RF	0.64%	32.20	28	171.1	0.14	User Downtime Hours	118.97
Diagnostics	0.27%	13.40	17	281.8	0.09		
PS	0.54%	27.18	10	479.0	0.05	Scheduled Hours	5000
Controls	0.12%	5.83	2	2395.0	0.01		
Network	0.00%	0.00	0		0.00	Delivered Hours	4790.0
Safety Interlocks	0.44%	21.92	5	958.0	0.03		
Radiation Monitors	0.00%	0.00	0		0.00	User Availability	95.80%
Water/ME	0.85%	42.28	6	798.3	0.03		
Vacuum	0.00%	0.00	0		0.00	Longest period w/out a fault	316.42
Operations	0.09%	4.38	3	1596.7	0.02		
AOP	0.07%	3.32	3	1596.7	0.02		
Utilities	0.52%	26.03	6	798.3	0.03		
Electrical - APS	0.06%	2.83	1	4790.0	0.01		
Electrical - ANL	0.36%	18.02	2	2395.0	0.01		
Cooling - ANL	0.10%	5.18	3	1596.7	0.02		
Other	0.00%	0.00	0		0.00		
Unidentified	0.02%	0.90	2	2395.0	0.01		
APS-U					0.00		
Total	3.55%	177.45	83	57.7	0.42		

	Unavailability	Unavailability	Number	Mean Time	Faults Per		
Run 2021-3	Percent	Hours	of Faults	to Beam Loss	Day		
RF	0.74%	11.83	9	170.8	0.14	User Downtime Hours	62.77
Diagnostics	0.00%				0.00		
PS	0.14%	2.17	2	768.6	0.03	Scheduled Hours	1600.0
Controls	0.00%				0.00	Delivered Hours	1537.2
Network							
Safety Interlocks	0.00%				0.00	User Availability	96.08%
Radiation Monitors	0.00%				0.00		
Water/ME	1.00%	16.00	1	1537.2	0.02		
Vacuum	0.00%				0.00	Longest period w/out a fault	316.42
AOP	0.09%	1.43	1	1537.2	0.02		
MCR	0.06%	0.93	0		0.00		
ID-FE	0.00%				0.00		
Utilities	0.00%				0.00		
Electrical - APS	0.00%				0.00		
Electrical - ANL	0.00%				0.00		
Cooling - ANL	0.00%				0.00		
Other	0.00%				0.00		
Unidentified	0.00%				0.00		
Total	2.02%	32.37	13	118.2	0.20		

	Unavailability	Unavailability	Number	Mean Time	Faults Per		
Run 2022-1	Percent	Hours	of Faults	to Beam Loss	Day		
RF	0.22%	3.85	8	211.8	0.11	User Downtime Hours	56.20
Diagnostics	0.27%	4.77	6	282.5	0.08		
PS	0.81%	14.18	6	282.5	0.08	Scheduled Hours	1751
Controls	0.08%	1.45	1	1694.8	0.01	Delivered Hours	1694.8
Network	0.00%						
Safety Interlocks	0.87%	15.32	4	423.7	0.06	User Availability	96.8%
Radiation Monitors	0.00%				0.00		
MOM	0.41%	7.23	0		0.00		
Vacuum	0.00%				0.00	Longest period w/out a fault	250.72
Operations	0.00%				0.00		
AOP	0.19%	3.32	3	564.9	0.04		
Utilities	0.30%	5.18	3	564.9	0.04		
Electrical - APS	0.00%				0.00		
Electrical - ANL	0.00%				0.00		
Cooling - ANL	0.30%	5.18	3	564.9	0.04		
Other	0.00%				0.00		
Unidentified	0.05%	0.90	2	847.4	0.03		
Total	3.32%	56.20	33	51.4	0.47		

	Unavailability	Unavailability	Number	Mean Time	Faults Per		
Run 2022-2	Percent	Hours	of Faults	to Beam Loss	Day		
RF	1.34%	16.52	11	139.7	0.17	User Downtime Hours	
Diagnostics	0.33%	8.63	11	139.7	0.17		
PS	0.77%	10.83	2	768.6	0.03	Scheduled Hours	1649.00
Controls	0.06%	4.38	1	1537.2	0.02	Delivered Hours	1557.9
Network	0.00%						
Safety Interlocks	0.06%	6.60	1	1537.2	0.02	User Availability	94.5%
Radiation Monitors	0.00%				0.00		
MOM	0.40%	19.05	5	307.4	0.08		
Vacuum	0.00%	0.00			0.00	Longest period w/out a fault	286.43
AOP	0.03%	3.45	3	512.4	0.05		
MCR	0.00%	0.75	0		0.00		
ID-FE	0.00%				0.00		
ID-FE/MD	0.00%				0.00		
UES	0.00%				0.00		
Utilities	0.00%	20.85	3	512.4	0.05		
Electrical - APS	0.00%	2.83	1	1537.2	0.02		
Electrical - ANL	0.00%	18.02	2	768.6	0.03		
Cooling - ANL	0.00%				0.00		
Other	0.18%				0.00		
Unidentified	0.03%				0.00		
APS-U	0.00%				0.00		
Total	5.52%	91.07	37	42.1	0.57		

Updated 10/5/2022