

FY 2021 Reliability Summary

Data through Run 2021-2

	Unavailability	Unavailability	Number	Mean Time	Faults Per		
FY 2021 Actual	Percent	Hours	of Faults	to Beam Loss	Day		
RF	0.80%	39.82	30	161.2	0.15	User Downtime Hours	111.67
Diagnostics	0.23%	11.57	4	1209.1	0.02		
PS	0.76%	37.95	16	302.3	0.08	Scheduled Hours	5000
Controls	0.12%	5.80	4	1209.1	0.02		
Network	0.12%	6.25	0		0.00	Delivered Hours	4836.5
Safety Interlocks	0.20%	10.22	6	806.1	0.03		
Radiation Monitors	0.00%	0.00	0		0.00	User Availability	96.73%
Water/ME	0.22%	10.80	2	2418.2	0.01		
Vacuum	0.47%	23.40	1	4836.5	0.00	Longest period w/out a fault	260.22
Operations	0.07%	3.60	2	2418.2	0.01		
AOP	0.01%	0.48	1	4836.5	0.00		
Utilities	0.19%	9.58	3	1612.2	0.01		
Electrical - APS	0.00%	0.00	0		0.00		
Electrical - ANL	0.19%	9.58	3	1612.2	0.01		
Cooling - ANL	0.00%	0.00	0		0.00		
Other	0.06%	2.98	0		0.00		
Unidentified	0.02%	1.08	2	2418.2	0.01		
APS-U					0.00		
Total	3.27%	163.53	71	68.1	0.35		

	Unavailability	Unavailability	Number	Mean Time	Faults Per		
Run 2020-3	Percent	Hours	of Faults	to Beam Loss	Day		
RF	0.46%	7.35	4	384.3	0.06	User Downtime Hours	71.77
Diagnostics	0.39%	6.22	0		0.00		
PS	0.68%	10.97	4	384.3	0.06	Scheduled Hours	1609.0
Controls	0.30%	4.82	2	768.6	0.03	Delivered Hours	1537.2
Network		6.25	0				
Safety Interlocks	0.46%	7.33	4	384.3	0.06	User Availability	95.54%
Radiation Monitors	0.00%	0.00	0		0.00		
Water/ME	0.11%	1.73	1	1537.2	0.02		
Vacuum	1.45%	23.40	1	1537.2	0.02	Longest period w/out a fault	257.81
Operations	0.19%	3.03	1	1537.2	0.02		
ID-FE	0.00%	0.00	0		0.00		
Utilities	0.00%	0.00	0		0.00		
Electrical - APS	0.00%	0.00	0		0.00		
Electrical - ANL	0.00%	0.00	0		0.00		
Cooling - ANL	0.00%	0.00	0		0.00		
Other	0.00%	0.00	0		0.00		
Unidentified	0.04%	0.67	1	1537.2	0.02		
Total	4.46%	71.77	18	85.4	0.28		

	Unavailability	Unavailability	Number	Mean Time	Faults Per		
Run 2021-1	Percent	Hours	of Faults	to Beam Loss	Day		
RF	0.61%	10.73	8	215.9	0.11	User Downtime Hours	39.90
Diagnostics	0.00%				0.00		
PS	0.82%	14.50	5	345.4	0.07	Scheduled Hours	1767
Controls	0.00%				0.00	Delivered Hours	1727.1
Network	0.00%						
Safety Interlocks	0.11%	1.95	1	1727.1	0.01	User Availability	97.7%
Radiation Monitors	0.00%				0.00		
MOM	0.15%	2.65	1	1727.1	0.01		
Vacuum	0.00%				0.00	Longest period w/out a fault	260.22
Operations	0.00%				0.00		
AOP	0.03%	0.48	1	1727.1	0.01		
Utilities	0.54%	9.58	3	575.7	0.04		
Electrical - APS	0.00%				0.00		
Electrical - ANL	0.54%	9.58	3	575.7	0.04		
Cooling - ANL	0.00%				0.00		
Other	0.00%				0.00		
Unidentified	0.00%				0.00		
Total	2.31%	39.90	19	90.9	0.26		

	Unavailability	Unavailability	Number	Mean Time	Faults Per		
Run 2021-2	Percent	Hours	of Faults	to Beam Loss	Day		
RF	1.34%	21.73	18	85.4	0.28	User Downtime Hours	51.87
Diagnostics	0.33%	5.35	4	384.3	0.06		
PS	0.77%	12.48	7	219.6	0.11	Scheduled Hours	1624.00
Controls	0.06%	0.98	2	768.6	0.03	Delivered Hours	1572.1
Network	0.00%						
Safety Interlocks	0.06%	0.93	1	1537.2	0.02	User Availability	96.8%
Radiation Monitors	0.00%				0.00		
MOM	0.40%	6.42	0		0.00		
Vacuum	0.00%				0.00	Longest period w/out a fault	141.14
AOP	0.03%	0.57	1	1537.2	0.02		
MCR	0.00%				0.00		
ID-FE	0.00%				0.00		
ID-FE/MD	0.00%				0.00		
UES	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	0.18%	2.98	0		0.00		
Unidentified	0.03%	0.42	1	1537.2	0.02		
APS-U	0.00%				0.00		
Total	3.19%	51.87	34	46.2	0.52		

Updated 9/30/2021