

FY 2020 Reliability Summary

Data through Run 2020-2

	Unavailability	Unavailability	Number	Mean Time	Faults Per		
FY 2020 Actual	Percent	Hours	of Faults	to Beam Loss	Day		
RF	0.23%	11.50	10	485.3	0.05	User Downtime Hours	146.42
Diagnostics	0.00%	0.00	0		0.00		
PS	0.23%	11.70	9	539.2	0.04	Scheduled Hours	5000
Controls	0.16%	7.85	3	1617.7	0.01		
Network	0.00%	0.00	0		0.00	Delivered Hours	4853.2
Safety Interlocks	0.00%	0.00	0		0.00		
Radiation Monitors	0.04%	1.97	2	2426.6	0.01	User Availability	97.06%
Water/ME	1.60%	79.90	3	1617.7	0.01		
Vacuum	0.00%	0.00	0		0.00	Longest period w/out a fault	493.51
Operations	0.12%	6.18	3	1617.7	0.01		
AOP	0.03%	1.57	0		0.00		
Utilities	0.35%	17.65	3	1617.7	0.01		
Electrical - APS	0.00%	0.00	0		0.00		
Electrical - ANL	0.30%	15.17	2	2426.6	0.01		
Cooling - ANL	0.05%	2.48	1	4853.2	0.00		
Other	0.11%	5.33	2	2426.6	0.01		
Unidentified	0.01%	0.60	1	4853.2	0.00		
APS-U					0.00		
Total	2.89%	144.25	36	134.8	0.18		

	Unavailability	Unavailability	Number	Mean Time	Faults Per		
Run 2019-3	Percent	Hours	of Faults	to Beam Loss	Day		
RF	0.22%	3.52	3	505.4	0.05	User Downtime Hours	84.78
Diagnostics	0.00%	0.00	0		0.00		
PS	0.12%	1.92	2	758.1	0.03	Scheduled Hours	1601.0
Controls	0.19%	3.02	0		0.00	Delivered Hours	1516.2
Network	0.00%	0.00	0		0.00		
Safety Interlocks	0.00%	0.00	0		0.00	User Availability	94.70%
Radiation Monitors	0.08%	1.28	1	1516.2	0.02		
Water/ME	4.56%	72.98	1	1516.2	0.02		
Vacuum	0.00%	0.00	0		0.00	Longest period w/out a fault	493.51
Operations	0.13%	2.07	1	1516.2	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	0.00%	0.00	0		0.00		
Total	5.30%	84.78	8	189.5	0.13		

	Unavailability	Unavailability	Number	Mean Time	Faults Per		
Run 2020-1	Percent	Hours	of Faults	to Beam Loss	Day		
RF	0.22%	4.42	5	386.7	0.06	User Downtime Hours	34.40
Diagnostics	0.00%	0.00	0		0.00		
PS	0.14%	2.77	2	966.8	0.02	Scheduled Hours	1968
Controls	0.15%	3.00	2	966.8	0.02	Delivered Hours	1933.6
Network	0.00%	0.00	0		0.00		
Safety Interlocks	0.00%	0.00	0		0.00	User Availability	98.3%
Radiation Monitors	0.03%	0.68	1	1933.6	0.01		
MOM	0.25%	4.88	0		0.00		
Vacuum	0.00%	0.00	0		0.00	Longest period w/out a fault	430.8
Operations	0.15%	2.88	1	1933.6	0.01		
AOP	0.08%	1.57	0		0.00		
Utilities	0.56%	11.08	2	966.8	0.02		
Electrical - APS	0.00%	0.00	0		0.00		
Electrical - ANL	0.44%	8.60	1	1933.6	0.01		
Cooling - ANL	0.13%	2.48	1	1933.6	0.01		
Other	0.16%	3.13	2	966.8	0.02		
Unidentified	0.00%	0.00	0		0.00		
Total	1.78%	34.42	15	128.9	0.19		

	Unavailability	Unavailability	Number	Mean Time	Faults Per		
Run 2020-2	Percent	Hours	of Faults	to Beam Loss	Day		
RF	0.25%	3.57	2	758.1	0.03	User Downtime Hours	27.23
Diagnostics	0.00%	0.00	0		0.00		
PS	0.49%	7.02	5	303.2	0.08	Scheduled Hours	1431.0
Controls	0.13%	1.83	1	1516.2	0.02	Delivered Hours	1403.4
Network	0.00%	0.00	0		0.00		
Safety Interlocks	0.00%	0.00	0		0.00	User Availability	98.1%
Radiation Monitors	0.00%	0.00	0		0.00		
MOM	0.14%	2.03	2	758.1	0.03		
Vacuum	0.00%	0.00	0		0.00	Longest period w/out a fault	430.8
AOP	0.09%	1.23	1	1516.2	0.02		
MCR	0.15%	2.18	0		0.00		
ID-FE	0.00%	0.00	0		0.00		
ID-FE/MD	0.00%	0.00	0		0.00		
UES	0.00%	0.00	0		0.00		
Utilities	0.46%	6.57	1	1516.2	0.02		
Electrical - APS	0.00%	0.00	0		0.00		
Electrical - ANL	0.46%	6.57	1	1516.2	0.02		
Cooling - ANL	0.00%	0.00	0		0.00		
Other	0.15%	2.20	1	1516.2	0.02		
Unidentified	0.04%	0.60	1	1516.2	0.02		
APS-U	0.00%	0.00	0		0.00		
Total	1.90%	27.23	13	108.0	0.22		

Updated 9/29/2020