

**CONTRACT PERFORMANCE REPORT  
 FORMAT 1 - WORK BREAKDOWN STRUCTURE  
 PERFORMANCE DATA (Control Account)**

Status	May 2021 (\$k) ITEM	CURRENT PERIOD					CUMULATIVE TO DATE							AT COMPLETE		
		BCWS	BCWP	ACWP	VARIANCE		BCWS	BCWP	ACWP	VARIANCE				BAC	EAC	VAC
					SV	CV				SV	SPI	CV	CPI			
	<b>P.01 - PPU Project Management</b>	<b>347</b>	<b>363</b>	<b>385</b>	<b>16</b>	<b>(22)</b>	<b>8,832</b>	<b>8,816</b>	<b>8,437</b>	<b>(16)</b>	<b>1.00</b>	<b>378</b>	<b>1.04</b>	<b>22,169</b>	<b>21,791</b>	<b>378</b>
	<b>P.01.01 - Project Management</b>	<b>57</b>	<b>73</b>	<b>72</b>	<b>16</b>	<b>1</b>	<b>1,989</b>	<b>1,973</b>	<b>1,964</b>	<b>(16)</b>	<b>0.99</b>	<b>8</b>	<b>1.00</b>	<b>4,572</b>	<b>4,563</b>	<b>8</b>
	P.01.01.01 - Management	57	73	72	16	1	1,955	1,939	1,930	(16)	0.99	8	1.00	4,393	4,385	8
	P.01.01.01 / ORNL - Management	57	73	72	16	1	1,955	1,939	1,930	(16)	0.99	8	1.00	4,393	4,385	8
	P.01.01.02 - Project Reviews	-	-	-	-	-	34	34	34	-	1.00	0	1.00	179	179	(0)
	P.01.01.02 / ORNL - Project Reviews	-	-	-	-	-	34	34	34	-	1.00	0	1.00	179	179	(0)
	<b>P.01.02 - Project Support</b>	<b>250</b>	<b>250</b>	<b>258</b>	<b>-</b>	<b>(7)</b>	<b>5,761</b>	<b>5,761</b>	<b>5,384</b>	<b>-</b>	<b>1.00</b>	<b>378</b>	<b>1.07</b>	<b>14,778</b>	<b>14,400</b>	<b>378</b>
	P.01.02.01 - Project Controls	118	118	121	-	(3)	3,946	3,946	3,926	-	1.00	19	1.00	9,471	9,451	19
	P.01.02.01 / ORNL - Project Controls	118	118	121	-	(3)	3,946	3,946	3,926	-	1.00	19	1.00	9,471	9,451	19
	P.01.02.03 - Procurement	3	3	2	-	2	73	73	70	-	1.00	3	1.04	148	146	3
	P.01.02.03 / ORNL - Procurement	3	3	2	-	2	73	73	70	-	1.00	3	1.04	148	146	3
	P.01.02.04 - HR / Recruitment	-	-	-	-	-	1	1	1	-	1.00	0	1.00	1	1	0
<b>Complete</b>	P.01.02.04 / ORNL - HR / Recruitment	-	-	-	-	-	1	1	1	-	1.00	0	1.00	1	1	0
	P.01.02.05 - Communications	5	5	2	-	3	53	53	24	-	1.00	29	2.20	280	251	29
	P.01.02.05 / ORNL - Communications	5	5	2	-	3	53	53	24	-	1.00	29	2.20	280	251	29
	P.01.02.06 - Systems Engineering	16	16	17	-	(0)	348	348	344	-	1.00	4	1.01	1,125	1,122	4
	P.01.02.06 / ORNL - Systems Engineering	16	16	17	-	(0)	348	348	344	-	1.00	4	1.01	1,125	1,122	4
	P.01.02.07 - Technical Director	7	7	5	-	2	215	215	208	-	1.00	7	1.03	519	512	7
	P.01.02.07 / ORNL - Technical Director	7	7	5	-	2	215	215	208	-	1.00	7	1.03	519	512	7
	P.01.02.08 - Installation Coordination	101	101	112	-	(10)	1,125	1,125	809	-	1.00	316	1.39	3,233	2,917	316
	P.01.02.08 / ORNL - Installation Coordination	101	101	112	-	(10)	1,125	1,125	809	-	1.00	316	1.39	3,233	2,917	316
	<b>P.01.03 - ESH&amp;Q</b>	<b>40</b>	<b>40</b>	<b>55</b>	<b>-</b>	<b>(15)</b>	<b>1,082</b>	<b>1,082</b>	<b>1,089</b>	<b>-</b>	<b>1.00</b>	<b>(8)</b>	<b>0.99</b>	<b>2,820</b>	<b>2,828</b>	<b>(8)</b>
	P.01.03.01 - ES&H	22	22	42	-	(20)	792	792	836	-	1.00	(44)	0.95	1,950	1,993	(44)
	P.01.03.01 / ORNL - ES&H	22	22	42	-	(20)	792	792	836	-	1.00	(44)	0.95	1,950	1,993	(44)
	P.01.03.02 - QA	18	18	13	-	5	290	290	254	-	1.00	36	1.14	870	834	36
	P.01.03.02 / ORNL - QA	18	18	13	-	5	290	290	254	-	1.00	36	1.14	870	834	36
	<b>P.02 - SCL Systems</b>	<b>449</b>	<b>254</b>	<b>331</b>	<b>(194)</b>	<b>(77)</b>	<b>9,241</b>	<b>8,875</b>	<b>8,444</b>	<b>(366)</b>	<b>0.96</b>	<b>430</b>	<b>1.05</b>	<b>24,082</b>	<b>23,652</b>	<b>430</b>
	<b>P.02.01 - Management and System Integration</b>	<b>26</b>	<b>26</b>	<b>20</b>	<b>-</b>	<b>6</b>	<b>898</b>	<b>898</b>	<b>839</b>	<b>-</b>	<b>1.00</b>	<b>60</b>	<b>1.07</b>	<b>1,122</b>	<b>1,063</b>	<b>60</b>
	P.02.01.01 - Management and System Integration -SCL Systems	26	26	20	-	6	898	898	839	-	1.00	60	1.07	1,122	1,063	60
	P.02.01.01 / ORNL - Management and System Integration -SCL Systems	26	26	20	-	6	898	898	839	-	1.00	60	1.07	1,122	1,063	60
	<b>P.02.02 - Cavities</b>	<b>89</b>	<b>42</b>	<b>43</b>	<b>(48)</b>	<b>(1)</b>	<b>1,724</b>	<b>1,270</b>	<b>1,293</b>	<b>(454)</b>	<b>0.74</b>	<b>(23)</b>	<b>0.98</b>	<b>2,675</b>	<b>2,708</b>	<b>(33)</b>
	P.02.02.01 - Management and System Integration	7	7	12	-	(5)	257	257	225	-	1.00	31	1.14	315	284	31
	P.02.02.01.01 / ORNL - Management and System Integration -Cavities	7	7	12	-	(5)	257	257	225	-	1.00	31	1.14	315	284	31
	P.02.02.02 - Cavity Procurement	-	-	-	-	-	150	150	151	-	1.00	(0)	1.00	150	151	(0)
<b>Complete</b>	P.02.02.02 / ORNL - Design - Cavity Procurement	-	-	-	-	-	150	150	151	-	1.00	(0)	1.00	150	151	(0)
	P.02.02.04 - Cavity Reprocessing	-	-	-	-	-	1	-	-	(1)	0.00	0		108	108	0
	P.02.02.04.03 / ORNL - Procure/Fab - Cavity Reprocessing	-	-	-	-	-	1	-	-	(1)	0.00	0		108	108	0
	P.02.02.05 - Coupler Acquisition	42	34	30	(8)	4	776	670	760	(106)	0.86	(90)	0.88	846	936	(90)
<b>Complete</b>	P.02.02.05.02 / ORNL - Design - Coupler Acquisition	-	-	-	-	-	10	10	10	-	1.00	0	1.00	10	10	0
	P.02.02.05.05 / ORNL - Testing - Coupler Acquisition	42	34	30	(8)	4	767	660	750	(106)	0.86	(90)	0.88	836	927	(90)
	P.02.02.07 - HTA Testing	40	-	-	(40)	-	328	29	32	(298)	0.09	(3)	0.92	328	338	(10)
<b>Complete</b>	P.02.02.07.02 / ORNL - Design - HTA Testing	-	-	-	-	-	29	29	29	-	1.00	0	1.00	29	29	0
	P.02.02.07.05 / ORNL - Testing - HTA Testing	40	-	-	(40)	-	298	-	3	(298)	0.00	(3)	0.00	298	309	(10)
	P.02.02.08 - Coupler Waveguide Transition	0	1	1	1	(0)	212	163	125	(49)	0.77	38	1.31	927	892	36
	P.02.02.08.03 / ORNL - Procure/Fab - Coupler Waveguide Transition	0	1	1	1	(0)	212	163	125	(49)	0.77	38	1.31	927	892	36
	<b>P.02.03 - Cryomodule Integration (Partner Laboratory Scope)</b>	<b>298</b>	<b>151</b>	<b>206</b>	<b>(148)</b>	<b>(56)</b>	<b>5,188</b>	<b>5,241</b>	<b>4,934</b>	<b>53</b>	<b>1.01</b>	<b>308</b>	<b>1.06</b>	<b>14,186</b>	<b>13,878</b>	<b>308</b>
	P.02.03.01 - Partner Laboratory Component Development	298	151	206	(148)	(56)	5,188	5,241	4,934	53	1.01	308	1.06	14,186	13,878	308
<b>Complete</b>	P.02.03.01.01 / JLAB - Design	-	-	-	-	-	1,921	1,921	1,921	-	1.00	0	1.00	1,921	1,921	0
	P.02.03.01.04 / JLAB - Assemble & Test	298	151	206	(148)	(56)	3,267	3,320	3,012	53	1.02	308	1.10	9,315	9,008	308
	P.02.03.01.05 / JLAB - 8th Cryomodule	-	-	-	-	-	-	-	-	-	0	0		2,949	2,949	0
	<b>P.02.04 - Cryogenics</b>	<b>3</b>	<b>3</b>	<b>-</b>	<b>-</b>	<b>3</b>	<b>67</b>	<b>67</b>	<b>35</b>	<b>-</b>	<b>1.00</b>	<b>33</b>	<b>1.95</b>	<b>826</b>	<b>794</b>	<b>33</b>
	P.02.04.01 - Management and System Integration	3	3	-	-	3	28	28	13	-	1.00	16	2.25	120	105	16
	P.02.04.01.01 / ORNL - Management and System Integration - Cryogenics	3	3	-	-	3	28	28	13	-	1.00	16	2.25	120	105	16
	P.02.04.02 - Cryogenic Components	-	-	-	-	-	25	25	8	-	1.00	17	3.05	654	637	17
	P.02.04.02.03 / ORNL - Procure/Fab - Cryogenic Components	-	-	-	-	-	8	8	4	-	1.00	4	1.91	417	413	4
	P.02.04.02.04 / ORNL - Installation - Cryogenic Components	-	-	-	-	-	17	17	4	-	1.00	13	4.29	238	225	13
	P.02.04.03 - Cryogenics System Testing and Development	-	-	-	-	-	14	14	14	-	1.00	0	1.00	52	52	0
<b>Complete</b>	P.02.04.03.02 / ORNL - Design - Cryogenics System Testing and Development	-	-	-	-	-	14	14	14	-	1.00	0	1.00	14	14	0
	P.02.04.03.04 / ORNL - Installation - Cryogenics System Testing and Development	-	-	-	-	-	-	-	-	-	0	0		38	38	0
	<b>P.02.05 - Utility Systems</b>	<b>5</b>	<b>7</b>	<b>1</b>	<b>1</b>	<b>5</b>	<b>110</b>	<b>111</b>	<b>85</b>	<b>1</b>	<b>1.01</b>	<b>27</b>	<b>1.31</b>	<b>1,022</b>	<b>983</b>	<b>39</b>
	P.02.05.01 - Management and System Integration	5	5	1	-	4	70	70	40	-	1.00	30	1.74	176	146	30

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		BCWS	BCWP	ACWP	VARIANCE		BCWS	BCWP	ACWP	VARIANCE				BAC	EAC	VAC
					SV	CV				SV	SPI	CV	CPI			
Status	ITEM															
	P.02.05.01.01 / ORNL - Management and System Integration - Utility Systems	5	5	1	-	4	70	70	40	-	1.00	30	1.74	176	146	30
	P.02.05.02 - Beamline Vacuum	-	0	-	0	0	5	5	5	0	1.04	0	1.04	185	185	0
Complete	P.02.05.02.02 / ORNL - Design - Beamline Vacuum	-	-	-	-	-	5	5	5	-	1.00	0	1.00	5	5	0
	P.02.05.02.03 / ORNL - Procure/Fab - Beamline Vacuum	-	0	-	0	0	-	0	-	0		0		151	151	0
	P.02.05.02.04 / ORNL - Installation - Beamline Vacuum	-	-	-	-	-	-	-	-	-		0		29	29	0
	P.02.05.03 - Insulating Vacuum System	-	1	-	1	1	35	36	35	1	1.03	1	1.03	611	597	14
Complete	P.02.05.03.02 / ORNL - Design - Insulating Vacuum System	-	-	-	-	-	35	35	35	-	1.00	0	1.00	35	35	0
	P.02.05.03.03 / ORNL - Procure/Fab - Insulating Vacuum System	-	1	-	1	1	-	1	-	1		1		462	448	14
	P.02.05.03.04 / ORNL - Installation - Insulating Vacuum System	-	-	-	-	-	-	-	-	-		0		114	114	0
	P.02.05.04 - Water Systems	-	-	-	-	-	-	-	5	-		(5)	0.00	50	55	(5)
	P.02.05.04.03 / ORNL - Procure/Fab - Water Systems	-	-	-	-	-	-	-	5	-		(5)	0.00	16	21	(5)
	P.02.05.04.04 / ORNL - Installation - Water Systems	-	-	-	-	-	-	-	-	-		0		34	34	0
	<b>P.02.06 - System Integration</b>	<b>5</b>	<b>5</b>	<b>35</b>	<b>-</b>	<b>(30)</b>	<b>296</b>	<b>403</b>	<b>339</b>	<b>107</b>	<b>1.36</b>	<b>64</b>	<b>1.19</b>	<b>2,229</b>	<b>2,165</b>	<b>63</b>
	P.02.06.01 - Management and System Integration	5	5	-	-	5	197	197	181	-	1.00	16	1.09	410	393	16
	P.02.06.01.01 / ORNL - Management and System Integration - System Integration	5	5	-	-	5	197	197	181	-	1.00	16	1.09	410	393	16
	P.02.06.02 - Completed Cryomodule Testing	-	-	-	-	-	-	-	-	-		0		763	763	0
	P.02.06.02.05 / ORNL - Testing - Completed Cryomodule Testing	-	-	-	-	-	-	-	-	-		0		763	763	0
	P.02.06.03 - Cryomodule in Tunnel	-	-	-	-	-	-	-	-	-		0		641	641	0
	P.02.06.03.03 / ORNL - Procure/Fab - Cryomodule in Tunnel	-	-	-	-	-	-	-	-	-		0		33	33	0
	P.02.06.03.04 / ORNL - Installation - Cryomodule in Tunnel	-	-	-	-	-	-	-	-	-		0		608	608	0
	P.02.06.04 - Cryomodule Testing in Tunnel	-	-	-	-	-	-	-	-	-		0		209	209	(0)
	P.02.06.04.05 / ORNL - Testing	-	-	-	-	-	-	-	-	-		0		209	209	(0)
	P.02.06.05 - Plasma Process MB Cryomodule in Tunnel	-	-	35	-	(35)	99	206	159	107	2.08	47	1.30	206	159	47
	P.02.06.05.04 / ORNL - Installation - Plasma Process MB Cryomodule in Tunnel	-	-	35	-	(35)	99	206	159	107	2.08	47	1.30	206	159	47
	<b>P.02.07 - SCL Controls</b>	<b>22</b>	<b>22</b>	<b>26</b>	<b>(1)</b>	<b>(4)</b>	<b>957</b>	<b>884</b>	<b>920</b>	<b>(73)</b>	<b>0.92</b>	<b>(36)</b>	<b>0.96</b>	<b>2,021</b>	<b>2,061</b>	<b>(39)</b>
	P.02.07.01 - Management and System Integration	5	5	26	-	(20)	220	220	310	-	1.00	(90)	0.71	390	480	(90)
	P.02.07.01.01 / ORNL - Management and System Integration - SCL Controls	5	5	26	-	(20)	220	220	310	-	1.00	(90)	0.71	390	480	(90)
	P.02.07.02 - Linac Beamline Vacuum Controls	7	2	-	(5)	2	151	114	98	(38)	0.75	16	1.16	223	208	16
	P.02.07.02.02 / ORNL - Design - Linac Beamline Vacuum Controls	-	-	-	-	-	99	90	95	(9)	0.91	(5)	0.95	99	104	(5)
	P.02.07.02.04 / ORNL - Installation - Linac Beamline Vacuum Controls	7	2	-	(5)	2	52	23	3	(29)	0.45	21	0.85	124	104	21
	P.02.07.03 - Linac Insulating Vacuum System Controls	-	14	-	14	14	253	229	192	(24)	0.91	37	1.19	340	303	37
Complete	P.02.07.03.02 / ORNL - Design - Linac Insulating Vacuum System Controls	-	-	-	-	-	159	159	159	-	1.00	0	1.00	159	159	0
	P.02.07.03.04 / ORNL - Installation - Linac Insulating Vacuum System Controls	-	14	-	14	14	94	71	33	(24)	0.75	37	2.12	182	144	37
	P.02.07.04 - Cryomodule Controls	10	-	-	(10)	-	333	321	321	(12)	0.97	0	1.00	1,068	1,071	(3)
Complete	P.02.07.04.02 / ORNL - Design - Cryomodule Controls	-	-	-	-	-	321	321	321	-	1.00	0	1.00	321	321	0
	P.02.07.04.04 / ORNL - Installation - Cryomodule Controls	10	-	-	(10)	-	12	-	-	(12)	0.00	0		747	749	(3)
	<b>P.03 - RF Systems</b>	<b>685</b>	<b>928</b>	<b>952</b>	<b>244</b>	<b>(24)</b>	<b>19,180</b>	<b>19,596</b>	<b>19,532</b>	<b>416</b>	<b>1.02</b>	<b>64</b>	<b>1.00</b>	<b>43,696</b>	<b>44,098</b>	<b>(402)</b>
	<b>P.03.01 - Management and System Integration</b>	<b>9</b>	<b>9</b>	<b>11</b>	<b>-</b>	<b>(2)</b>	<b>365</b>	<b>365</b>	<b>358</b>	<b>-</b>	<b>1.00</b>	<b>6</b>	<b>1.02</b>	<b>534</b>	<b>528</b>	<b>6</b>
	P.03.01.01 - Management and System Integration - RF Systems	9	9	11	-	(2)	365	365	358	-	1.00	6	1.02	534	528	6
	P.03.01.01 / ORNL - Management and System Integration - RF Systems	9	9	11	-	(2)	365	365	358	-	1.00	6	1.02	534	528	6
	<b>P.03.02 - SCL HPRF</b>	<b>-</b>	<b>8</b>	<b>-</b>	<b>8</b>	<b>8</b>	<b>4,918</b>	<b>4,919</b>	<b>4,889</b>	<b>1</b>	<b>1.00</b>	<b>30</b>	<b>1.01</b>	<b>13,048</b>	<b>13,019</b>	<b>29</b>
	P.03.02.01 - Management and System Integration	-	-	-	-	-	44	44	44	-	1.00	0	1.00	81	81	(0)
	P.03.02.01.01 / ORNL - Management and System Integration - SCL HPRF	-	-	-	-	-	44	44	44	-	1.00	0	1.00	81	81	(0)
	P.03.02.02 - Transmitters (SCL)	-	-	-	-	-	4,860	4,860	4,841	-	1.00	19	1.00	6,350	6,332	19
	P.03.02.02.02 / ORNL - Design - Transmitters (SCL)	-	-	-	-	-	4,860	4,860	4,841	-	1.00	19	1.00	6,074	6,055	19
	P.03.02.02.04 / ORNL - Installation - Transmitters (SCL)	-	-	-	-	-	-	-	-	-		0		276	276	(0)
	P.03.02.03 - Klystrons (SCL)	-	8	-	8	8	15	15	5	-	1.00	10	3.16	6,079	6,069	10
Complete	P.03.02.03.02 / ORNL - Design - Klystrons (SCL) - Klystrons (SCL)	-	-	-	-	-	5	5	5	-	1.00	0	1.00	5	5	0
	P.03.02.03.03 / ORNL - Procure/Fab - Klystrons (SCL)	-	8	-	8	8	10	10	-	-	1.00	10		5,977	5,967	10
	P.03.02.03.04 / ORNL - Installation - Klystrons (SCL)	-	-	-	-	-	-	-	-	-		0		97	97	0
	P.03.02.05 - Circulators (SCL)	-	1	-	1	1	-	1	-	1		1		537	537	1
	P.03.02.05.03 / ORNL - Procure/Fab - Circulators (SCL)	-	1	-	1	1	-	1	-	1		1		537	537	1
	<b>P.03.03 - NCL HPRF</b>	<b>24</b>	<b>-</b>	<b>-</b>	<b>(24)</b>	<b>-</b>	<b>1,122</b>	<b>1,097</b>	<b>1,083</b>	<b>(24)</b>	<b>1</b>	<b>15</b>	<b>1</b>	<b>4,985</b>	<b>4,967</b>	<b>18</b>
	P.03.03.01 - Management and System Integration	-	-	-	-	-	15	15	15	-	1	-	1	15	15	-
Complete	P.03.03.01.01 / ORNL - Management and System Integration - NCL HPRF	-	-	-	-	-	15	15	15	-	1	-	1	15	15	-
	P.03.03.02 - Transmitters (NCL)	-	-	-	-	-	0	0	0	-	1	-	1	209	210	(1)
	P.03.03.02.02 / ORNL - Design - Transmitters (NCL)	-	-	-	-	-	0	0	0	-	1	-	1	14	15	(0)
	P.03.03.02.03 / ORNL - Procure/Fab - Transmitters (NCL)	-	-	-	-	-	-	-	-	-		-		182	182	(1)
	P.03.03.02.04 / ORNL - Installation - Transmitters (NCL)	-	-	-	-	-	-	-	-	-		-		13	13	-
	P.03.03.03 - Klystrons (NCL)	24	-	-	(24)	-	1,028	1,003	989	(24)	1	15	1	4,682	4,663	19
	P.03.03.03.02 / ORNL - Design - Klystrons (NCL)	24	-	-	(24)	-	1,027	1,003	989	(24)	1	15	1	1,675	1,661	15
	P.03.03.03.03 / ORNL - Procure/Fab - Klystrons (NCL)	0	-	-	(0)	-	0	-	-	(0)	-	-	-	2,971	2,966	5
	P.03.03.03.04 / ORNL - Installation - Klystrons (NCL)	-	-	-	-	-	-	-	-	-		-		36	36	-
	P.03.03.04 - Circulators (NCL)	-	-	-	-	-	57	57	57	-	1	-	1	57	57	-

May 2021 (\$k)		CURRENT PERIOD					CUMULATIVE TO DATE							AT COMPLETE		
		BCWS	BCWP	ACWP	VARIANCE		BCWS	BCWP	ACWP	VARIANCE				BAC	EAC	VAC
					SV	CV				SV	SPI	CV	CPI			
Status	ITEM															
Complete	P.03.03.04.02 / ORNL - Design - Circulators (NCL)	-	-	-	-	-	57	57	57	-	1	-	1	57	57	-
	P.03.03.05 - Glycol/Water Loads (NCL)	-	-	-	-	-	22	22	22	-	1	-	1	22	22	-
Complete	P.03.03.05.02 / ORNL - Design - Glycol/Water Loads (NCL)	-	-	-	-	-	22	22	22	-	1	-	1	22	22	-
	<b>P.03.04 - LLRF</b>	<b>133</b>	<b>562</b>	<b>558</b>	<b>429</b>	<b>4</b>	<b>3,704</b>	<b>4,575</b>	<b>4,490</b>	<b>872</b>	<b>1.24</b>	<b>85</b>	<b>1.02</b>	<b>5,944</b>	<b>5,885</b>	<b>59</b>
	P.03.04.01 - Management and System Integration	6	6	4	-	2	149	149	121	-	1.00	28	1.23	335	307	28
	P.03.04.01.01 / ORNL - Management and System Integration - LLRF	6	6	4	-	2	149	149	121	-	1.00	28	1.23	335	307	28
	P.03.04.02 - LLRF System	116	136	181	20	(45)	3,285	3,729	3,758	444	1.14	(29)	0.99	4,838	4,893	(55)
	P.03.04.02.02 / ORNL - Design - LLRF System	43	43	39	-	4	3,099	3,099	3,170	-	1.00	(70)	0.98	3,307	3,377	(70)
	P.03.04.02.03 / ORNL - Procure/Fab - LLRF System	73	72	137	(1)	(65)	186	604	583	418	3.25	20	1.03	1,235	1,240	(5)
	P.03.04.02.04 / ORNL - Installation - LLRF System	-	21	5	21	16	-	26	5	26	-	21	5.38	295	275	20
	P.03.04.03 - Arc Detectors	11	386	372	375	14	63	456	423	393	7.29	33	1.08	487	454	33
Complete	P.03.04.03.02 / ORNL - Design - Arc Detectors	-	-	-	-	-	41	41	41	-	1.00	0	1.00	41	41	0
	P.03.04.03.03 / ORNL - Procure/Fab - Arc Detectors	11	386	372	375	14	22	415	382	393	19.21	33	1.09	421	388	33
	P.03.04.03.04 / ORNL - Installation - Arc Detectors	-	-	-	-	-	-	-	-	-	-	0	-	24	24	-
	P.03.04.04 - Reference Line	-	34	1	34	34	207	242	189	34	1.17	53	1.28	285	232	53
Complete	P.03.04.04.02 / ORNL - Design - Reference Line	-	-	-	-	-	7	7	8	-	1.00	(2)	0.82	7	8	(2)
	P.03.04.04.03 / ORNL - Procure/Fab - Reference Line	-	34	1	34	34	201	235	180	34	1.17	54	1.30	257	202	54
	P.03.04.04.04 / ORNL - Installation - Reference Line	-	-	-	-	-	-	-	-	-	-	0	-	21	21	-
	<b>P.03.05 - Existing Linac Modulators</b>	<b>32</b>	<b>76</b>	<b>37</b>	<b>44</b>	<b>40</b>	<b>3,117</b>	<b>3,051</b>	<b>3,204</b>	<b>(66)</b>	<b>0.98</b>	<b>(153)</b>	<b>0.95</b>	<b>4,869</b>	<b>5,022</b>	<b>(153)</b>
	P.03.05.01 - Management and System Integration	5	5	3	-	1	167	167	165	-	1.00	2	1.01	277	276	2
	P.03.05.01.01 / ORNL - Management and System Integration - Existing Linac Modulators	5	5	3	-	1	167	167	165	-	1.00	2	1.01	277	276	2
	P.03.05.02 - Modulator system	-	-	-	-	-	29	29	29	-	1.00	0	1.00	29	29	-
Complete	P.03.05.02.02 / ORNL - Design - Modulator system	-	-	-	-	-	29	29	29	-	1.00	0	1.00	29	29	-
	P.03.05.04 - Modulator System Test Article and Development Activities	-	-	-	-	-	455	455	455	-	1.00	0	1.00	455	455	-
Complete	P.03.05.04.02 / ORNL - Design - Modulator System Test Article Development and Testing	-	-	-	-	-	455	455	455	-	1.00	0	1.00	455	455	-
	P.03.05.05 - Warm Linac Test HVCM	-	-	-	-	-	1,405	1,405	1,405	-	1.00	0	1.00	1,405	1,405	-
Complete	P.03.05.05.02 / ORNL - Design - Warm Linac Test HVCM	-	-	-	-	-	1,405	1,405	1,405	-	1.00	0	1.00	1,405	1,405	-
	P.03.05.06 - Upgrade RFQ/DTL Modulators	27	72	33	44	38	1,061	995	1,150	(66)	0.94	(155)	0.87	2,703	2,858	(155)
	P.03.05.06.02 / ORNL - Design - Upgrade RFQ-Mod1	27	72	33	44	38	1,060	972	1,150	(89)	0.92	(178)	0.84	1,268	1,447	(178)
	P.03.05.06.03 / ORNL - Procure/Fab - Upgrade RFQ-Mod1	-	-	-	-	-	1	24	-	23	40.76	24	-	935	912	24
	P.03.05.06.04 / ORNL - Installation - Upgrade RFQ-Mod1	-	-	-	-	-	-	-	-	-	-	0	-	499	499	-
	<b>P.03.06 - New Linac Modulators</b>	<b>60</b>	<b>40</b>	<b>30</b>	<b>(20)</b>	<b>10</b>	<b>2,647</b>	<b>2,542</b>	<b>2,445</b>	<b>(104)</b>	<b>0.96</b>	<b>97</b>	<b>1.04</b>	<b>5,313</b>	<b>5,282</b>	<b>31</b>
	P.03.06.01 - Management and System Integration	4	4	4	-	(0)	115	115	94	-	1.00	21	1.22	236	215	21
	P.03.06.01.01 / ORNL - Management and System Integration - New Linac Modulators	4	4	4	-	(0)	115	115	94	-	1.00	21	1.22	236	215	21
	P.03.06.02 - Transformer	-	1	1	1	(0)	360	361	351	1	1.00	10	1.03	1,320	1,310	10
Complete	P.03.06.02.02 / ORNL - Design - Transformer	-	-	-	-	-	40	40	40	-	1.00	0	1.00	40	40	-
	P.03.06.02.03 / ORNL - Procure/Fab - Transformer	-	1	1	1	(0)	320	321	311	1	1.00	10	1.03	1,266	1,256	10
	P.03.06.02.04 / ORNL - Installation - Transformer	-	-	-	-	-	-	-	-	-	-	0	-	14	14	-
	P.03.06.03 - SCR System	-	-	-	-	-	30	30	19	-	1.00	10	1.53	94	84	10
Complete	P.03.06.03.02 / ORNL - Design - SCR System	-	-	-	-	-	14	14	14	-	1.00	0	1.00	14	14	-
Complete	P.03.06.03.03 / ORNL - Procure/Fab - SCR System	-	-	-	-	-	16	16	5	-	1.00	10	2.89	16	5	10
	P.03.06.03.04 / ORNL - Installation - SCR System	-	-	-	-	-	-	-	-	-	-	0	-	64	64	-
	P.03.06.04 - Modulator System	-	4	17	4	(12)	558	545	493	(13)	0.98	52	1.11	1,806	1,819	(13)
Complete	P.03.06.04.02 / ORNL - Design - Modulator System	-	-	-	-	-	351	351	339	-	1.00	12	1.03	351	339	12
	P.03.06.04.03 / ORNL - Procure/Fab - Modulator System	-	4	17	4	(12)	207	194	154	(13)	0.94	40	1.26	1,128	1,152	(24)
	P.03.06.04.04 / ORNL - Installation - Modulator System	-	-	-	-	-	-	-	-	-	-	0	-	327	328	(1)
	P.03.06.05 - Modulator Control System	68	30	8	(38)	22	918	825	822	(92)	0.90	4	1.00	985	981	4
Complete	P.03.06.05.02 / ORNL - Design - Modulator Control System	-	-	1	-	(1)	422	422	440	-	1.00	(18)	0.96	422	440	(18)
	P.03.06.05.03 / ORNL - Procure/Fab - Modulator Control System	33	29	0	(4)	29	403	359	343	(45)	0.89	15	1.04	403	388	15
	P.03.06.05.04 / ORNL - Installation - Modulator Control System	36	1	6	(34)	(5)	93	45	39	(48)	0.49	7	1.17	160	153	7
	P.03.06.06 - Integrated System	(13)	-	-	13	-	15	15	15	-	1.00	0	1.00	222	222	(0)
Complete	P.03.06.06.02 / ORNL - Design - Integrated System	-	-	-	-	-	15	15	15	-	1.00	0	1.00	15	15	-
Complete	P.03.06.06.03 / ORNL - Procure/Fab - Integrated System	(13)	-	-	13	-	-	-	-	-	-	0	-	-	-	-
	P.03.06.06.04 / ORNL - Installation - Integrated System	-	-	-	-	-	-	-	-	-	-	0	-	207	207	(0)
	P.03.06.07 - Modulator Test Article & Testing	-	-	-	-	-	650	650	650	-	1.00	0	1.00	650	650	-
Complete	P.03.06.07.02 / ORNL - Design - Modulator Test Article & Testing	-	-	-	-	-	650	650	650	-	1.00	0	1.00	650	650	-
	<b>P.03.07 - Utilities</b>	<b>393</b>	<b>211</b>	<b>212</b>	<b>(183)</b>	<b>(1)</b>	<b>2,312</b>	<b>2,083</b>	<b>2,142</b>	<b>(228)</b>	<b>0.90</b>	<b>(58)</b>	<b>0.97</b>	<b>7,296</b>	<b>7,731</b>	<b>(435)</b>
	P.03.07.01 - Management and System Integration	48	48	45	-	3	684	684	679	-	1.00	5	1.01	1,531	1,527	5
	P.03.07.01.01 / ORNL - Management and System Integration - Utilities	48	48	45	-	3	684	684	679	-	1.00	5	1.01	1,531	1,527	5
	P.03.07.02 - Water Utilities, New Cold Linac SCL RF Cooling System (KL-06)	79	61	49	(18)	11	433	382	433	(51)	0.88	(51)	0.88	1,141	1,194	(53)
	P.03.07.02.02 / ORNL - Design - Water Utilities, New Cold Linac SCL RF Cooling System (KL-06)	5	5	7	-	(2)	316	316	327	-	1.00	(11)	0.97	366	377	(11)
	P.03.07.02.04 / ORNL - Installation - Water Utilities, New Cold Linac SCL RF Cooling System (KL-06)	74	56	43	(18)	13	117	66	106	(51)	0.57	(40)	0.62	775	816	(42)
	P.03.07.03 - Water Utilities, Modify Existing RFQ/DTL RF Cooling System (KL-04)	13	2	7	(11)	(5)	125	90	91	(34)	0.72	(1)	0.99	631	632	(1)
	P.03.07.03.02 / ORNL - Design - Water Utilities, Modify Existing RFQ/DTL RF Cooling System (KL-04)	-	-	-	-	-	84	84	84	-	1.00	0	1.00	98	98	(0)

Status	ITEM	CURRENT PERIOD					CUMULATIVE TO DATE							AT COMPLETE		
		BCWS	BCWP	ACWP	VARIANCE		BCWS	BCWP	ACWP	VARIANCE				BAC	EAC	VAC
					SV	CV				SV	SPI	CV	CPI			
	P.03.07.03.03 / ORNL - Procure/Fab - Water Utilities, Modify Existing RFQ/DTL RF Cooling System (KL-04)	13	2	7	(11)	(5)	41	6	7	(34)	0.16	(1)	0.88	298	299	(1)
	P.03.07.03.04 / ORNL - Installation - Water Utilities, Modify Existing RFQ/DTL RF Cooling System (KL-04)	-	-	-	-	-	-	-	-	-	-	0	-	235	235	-
	P.03.07.07 - Electrical	254	100	111	(154)	(11)	1,070	927	938	(143)	0.87	(11)	0.99	3,993	4,378	(386)
	P.03.07.07.02 / ORNL - Design - Electrical	11	11	2	-	9	600	600	536	-	1.00	64	1.12	732	668	64
	P.03.07.07.03 / ORNL - Procure/Fab - Electrical	258	19	(6)	(239)	25	380	255	270	(125)	0.67	(15)	0.94	960	1,265	(305)
	P.03.07.07.04 / ORNL - Installation - Electrical	(14)	71	115	85	(44)	90	72	131	(18)	0.80	(59)	0.55	2,301	2,445	(144)
	<b>P.03.08 - RF Controls</b>	<b>13</b>	<b>11</b>	<b>25</b>	<b>(2)</b>	<b>(14)</b>	<b>555</b>	<b>552</b>	<b>500</b>	<b>(2)</b>	<b>1.00</b>	<b>52</b>	<b>1.10</b>	<b>980</b>	<b>928</b>	<b>52</b>
	P.03.08.01 - Management and System Integration	3	3	1	-	2	145	145	141	-	1.00	4	1.02	224	220	4
	P.03.08.01.01 / ORNL - Management and System Integration - RF Controls	3	3	1	-	2	145	145	141	-	1.00	4	1.02	224	220	4
	P.03.08.02 - Linac RF Controls	10	8	24	(2)	(16)	408	406	357	(2)	0.99	49	1.14	749	700	48
	P.03.08.02.02 / ORNL - Design - Linac RF Controls	10	8	24	(2)	(16)	408	406	357	(2)	0.99	49	1.14	503	455	48
	P.03.08.02.03 / ORNL - Procure/Fab - Linac RF Controls	-	0	-	0	0	0	0	-	-	1.00	0	-	59	59	0
	P.03.08.02.04 / ORNL - Installation - Linac RF Controls	-	-	-	-	-	-	-	-	-	-	0	-	186	186	(0)
	P.03.08.03 - Linac Water System Controls	-	-	-	-	-	2	2	2	-	1.00	0	1.00	8	8	-
Complete	P.03.08.03.02 / ORNL - Design - Linac Water System Controls	-	-	-	-	-	2	2	2	-	1.00	0	1.00	2	2	-
	P.03.08.03.04 / ORNL - Installation - Linac Water System Controls	-	-	-	-	-	-	-	-	-	-	0	-	6	6	-
	<b>P.03.09 - RF/SCL Global Controls</b>	<b>20</b>	<b>11</b>	<b>79</b>	<b>(9)</b>	<b>(68)</b>	<b>442</b>	<b>411</b>	<b>420</b>	<b>(31)</b>	<b>0.93</b>	<b>(9)</b>	<b>0.98</b>	<b>726</b>	<b>736</b>	<b>(10)</b>
	P.03.09.01 - Management and System Integration	5	5	2	-	3	164	164	141	-	1.00	23	1.16	246	223	23
	P.03.09.01.01 / ORNL - Management and System Integration	5	5	2	-	3	164	164	141	-	1.00	23	1.16	246	223	23
	P.03.09.02 - Linac/SCL Timing/MPS	-	6	5	6	2	38	35	43	(3)	0.91	(8)	0.81	88	97	(8)
Complete	P.03.09.02.02 / ORNL - Design - Linac/SCL Timing/MPS	-	11	-	-	-	11	11	11	-	1.00	0	1.00	11	11	-
	P.03.09.02.03 / ORNL - Procure/Fab - Linac/SCL Timing/MPS	-	6	5	6	2	27	24	28	(3)	0.88	(5)	0.84	27	31	(5)
	P.03.09.02.04 / ORNL - Installation - Linac/SCL Timing/MPS	-	-	-	-	-	-	-	4	-	-	(4)	0.00	51	54	(4)
	P.03.09.03 - Linac/SCL Protection System	9	-	-	(9)	-	180	163	143	(17)	0.90	20	1.14	251	231	19
	P.03.09.03.02 / ORNL - Design - Linac/SCL Protection System	9	-	-	(9)	-	134	117	117	(17)	0.87	0	1.00	162	162	(0)
	P.03.09.03.04 / ORNL - Installation - Linac/SCL Protection System	-	-	-	-	-	46	46	26	-	1.00	20	1.75	89	70	20
	P.03.09.04 - Linac/SCL Networking and Computing Infrastructure	6	-	73	(6)	(73)	60	50	94	(10)	0.83	(44)	0.53	140	185	(45)
Complete	P.03.09.04.02 / ORNL - Design - Linac/SCL Networking and Computing Infrastructure	-	-	-	-	-	17	17	17	-	1.00	0	1.00	17	17	-
	P.03.09.04.03 / ORNL - Procure/Fab - Linac/SCL Networking and Computing Infrastructure	6	-	73	(6)	(73)	43	33	77	(10)	0.76	(44)	0.43	78	122	(44)
	P.03.09.04.04 / ORNL - Installation - Linac/SCL Networking and Computing Infrastructure	-	-	-	-	-	-	-	-	-	-	0	-	46	46	(0)
	<b>P.04 - Ring Systems</b>	<b>539</b>	<b>271</b>	<b>327</b>	<b>(268)</b>	<b>(57)</b>	<b>9,959</b>	<b>9,206</b>	<b>9,693</b>	<b>(753)</b>	<b>0.92</b>	<b>(486)</b>	<b>0.95</b>	<b>20,662</b>	<b>22,382</b>	<b>(1,721)</b>
	<b>P.04.01 - Management and System Integration</b>	<b>9</b>	<b>9</b>	<b>12</b>	<b>-</b>	<b>(4)</b>	<b>557</b>	<b>557</b>	<b>584</b>	<b>-</b>	<b>1.00</b>	<b>(27)</b>	<b>0.95</b>	<b>1,176</b>	<b>1,203</b>	<b>(27)</b>
	P.04.01.01 - Management and System Integration - Ring Systems	9	9	12	-	(4)	494	494	521	-	1.00	(27)	0.95	1,113	1,140	(27)
	P.04.01.01 / ORNL - Management and System Integration - Ring Systems	9	9	12	-	(4)	494	494	521	-	1.00	(27)	0.95	1,113	1,140	(27)
	P.04.01.02 - Design	-	-	-	-	-	63	63	63	-	1.00	0	1.00	63	63	-
Complete	P.04.01.02.01 / ORNL - System Design Reviews - Ring System	-	-	-	-	-	63	63	63	-	1.00	0	1.00	63	63	-
	<b>P.04.02 - Injection Region</b>	<b>90</b>	<b>38</b>	<b>117</b>	<b>(52)</b>	<b>(79)</b>	<b>3,128</b>	<b>3,081</b>	<b>3,237</b>	<b>(47)</b>	<b>0.99</b>	<b>(156)</b>	<b>0.95</b>	<b>7,927</b>	<b>9,299</b>	<b>(1,372)</b>
	P.04.02.01 - Management and System Integration	4	4	2	-	2	125	125	116	-	1.00	9	1.08	296	287	9
	P.04.02.01.01 / ORNL - Management and System Integration - Injection Region	4	4	2	-	2	125	125	116	-	1.00	9	1.08	296	287	9
	P.04.02.02 - Injection Region Magnets	32	31	44	(1)	(12)	2,169	2,158	2,378	(11)	0.99	(220)	0.91	5,386	6,810	(1,424)
	P.04.02.02.02 / ORNL - Design - Injection Region Magnets	-	-	31	(1)	(31)	2,106	2,100	2,361	(6)	1.00	(261)	0.89	2,233	2,498	(264)
	P.04.02.02.03 / ORNL - Procure/Fab - Injection Region Magnets	32	31	13	(1)	19	63	58	17	(5)	0.92	41	3.45	2,778	3,937	(1,159)
	P.04.02.02.04 / ORNL - Installation - Injection Region Magnets	-	-	-	-	-	-	-	-	-	-	0	-	375	375	-
	P.04.02.03 - Power Supplies	3	1	2	(2)	(1)	292	321	296	29	1.10	25	1.08	392	368	24
Complete	P.04.02.03.02 / ORNL - Design - Power Supplies	1	-	0	(1)	(0)	288	288	279	-	1.00	9	1.03	288	279	9
	P.04.02.03.03 / ORNL - Procure/Fab - Power Supplies	2	1	1	(1)	(0)	4	5	14	1	1.17	(9)	0.36	49	59	(10)
	P.04.02.03.04 / ORNL - Installation - Power Supplies	-	-	-	-	-	-	28	3	28	26	10.73	55	29	26	
	P.04.02.04 - Vacuum Systems	42	2	57	(40)	(55)	532	477	433	(55)	0.90	44	1.10	1,323	1,290	33
	P.04.02.04.02 / ORNL - Design - Vacuum Systems	42	2	57	(40)	(55)	532	477	433	(55)	0.90	44	1.10	681	639	42
	P.04.02.04.03 / ORNL - Procure/Fab - Vacuum Systems	-	-	-	-	-	-	-	-	-	0	-	-	642	651	(9)
	P.04.02.05 - Primary and Secondary Stripper Foil Mechanisms	10	-	13	(10)	(13)	10	-	14	(10)	0.00	(14)	0.00	529	544	(14)
	P.04.02.05.02 / ORNL - Design - Primary and Secondary Stripper Foil Mechanisms	10	-	13	(10)	(13)	10	-	14	(10)	0.00	(14)	0.00	243	257	(14)
	P.04.02.05.03 / ORNL - Procure/Fab - Primary and Secondary Stripper Foil Mechanisms	-	-	-	-	-	-	-	-	-	0	-	-	287	287	-
	<b>P.04.03 - Injection Dump</b>	<b>120</b>	<b>45</b>	<b>18</b>	<b>(75)</b>	<b>27</b>	<b>983</b>	<b>901</b>	<b>903</b>	<b>(81)</b>	<b>0.92</b>	<b>(2)</b>	<b>1.00</b>	<b>1,421</b>	<b>1,436</b>	<b>(16)</b>
	P.04.03.01 - Management and System Integration	4	4	4	-	(0)	61	61	56	-	1.00	6	1.10	116	111	6
	P.04.03.01.01 / ORNL - Management and System Integration - Injection Dump	4	4	4	-	(0)	61	61	56	-	1.00	6	1.10	116	111	6
	P.04.03.02 - Injection Dump Imaging System	117	42	14	(75)	27	755	674	681	(81)	0.89	(7)	0.99	1,138	1,159	(21)
	P.04.03.02.02 / ORNL - Design - Injection Dump Imaging System	100	35	13	(65)	21	661	633	636	(28)	0.96	(3)	1.00	672	675	(3)
	P.04.03.02.03 / ORNL - Procure/Fab - Injection Dump Imaging System	10	5	1	(5)	4	82	40	45	(43)	0.48	(5)	0.88	300	319	(19)
	P.04.03.02.04 / ORNL - Installation - Injection Dump Imaging System	7	1	-	(5)	1	12	1	-	(10)	0.12	1	-	166	165	1
	P.04.03.03 - Injection Dump Engineering Review	-	-	-	-	-	166	166	167	-	1.00	(0)	1.00	166	167	(0)
Complete	P.04.03.03.02 / ORNL - Design - Injection Dump Engineering Review	-	-	-	-	-	166	166	167	-	1.00	(0)	1.00	166	167	(0)

May 2021 (\$k)		CURRENT PERIOD					CUMULATIVE TO DATE							AT COMPLETE		
Status	ITEM	BCWS	BCWP	ACWP	VARIANCE		BCWS	BCWP	ACWP	VARIANCE				BAC	EAC	VAC
					SV	CV				SV	SPI	CV	CPI			
	<b>P.04.04 - Extraction Region</b>	7	8	6	0	1	1,251	1,245	1,289	(7)	0.99	(44)	0.97	2,217	2,261	(45)
	P.04.04.01 - Management and System Integration	2	2	2	-	(1)	112	112	120	-	1.00	(8)	0.94	189	197	(8)
	P.04.04.01.01 / ORNL - Management and System Integration - Extraction Region	2	2	2	-	(1)	112	112	120	-	1.00	(8)	0.94	189	197	(8)
	P.04.04.02 - Extraction Region Magnets	-	-	1	-	(1)	235	228	228	(7)	0.97	(0)	1.00	305	306	(1)
	P.04.04.02.02 / ORNL - Design - Extraction Region Magnets	-	-	1	-	(1)	235	228	228	(7)	0.97	(0)	1.00	235	235	(1)
	P.04.04.02.03 / ORNL - Procure/Fab - Extraction Region Magnets	-	-	-	-	-	-	-	-	-	-	0	-	14	14	-
	P.04.04.02.04 / ORNL - Installation - Extraction Region Magnets	-	-	-	-	-	-	-	-	-	-	0	-	56	56	-
	P.04.04.03 - Power Supplies	5	6	3	0	3	905	905	941	0	1.00	(36)	0.96	1,723	1,759	(36)
Complete	P.04.04.03.02 / ORNL - Design - Power Supplies	5	6	3	0	3	905	905	941	0	1.00	(36)	0.96	905	941	(36)
	P.04.04.03.03 / ORNL - Procure/Fab - Power Supplies	-	-	-	-	-	-	-	-	-	-	0	-	618	618	-
	P.04.04.03.04 / ORNL - Installation - Power Supplies	-	-	-	-	-	-	-	-	-	-	0	-	199	199	-
	<b>P.04.05 - Utilities</b>	4	3	1	(1)	3	446	445	421	(1)	1.00	24	1.06	1,767	1,743	24
	P.04.05.01 - Management and System Integration	3	3	0	-	3	58	58	48	-	1.00	10	1.22	111	100	10
	P.04.05.01.01 / ORNL - Management and System Integration - Utilities	3	3	0	-	3	58	58	48	-	1.00	10	1.22	111	100	10
	P.04.05.02 - Main Ring Dipole XFMR Upgrade	1	0	0	(1)	0	13	12	7	(1)	0.90	4	1.58	63	59	4
Complete	P.04.05.02.02 / ORNL - Design - Electrical	-	-	0	-	(0)	7	7	7	-	1.00	(1)	0.92	7	7	(1)
	P.04.05.02.03 / ORNL - Procure/Fab - Electrical	1	0	-	(1)	0	6	5	-	(1)	0.79	5	-	28	23	5
	P.04.05.02.04 / ORNL - Installation - Electrical	-	-	-	-	-	-	-	-	-	-	0	-	28	28	-
	P.04.05.03 - RN-03 DIW Cooling Upgrade	-	-	-	-	-	332	332	332	-	1.00	0	1.00	1,278	1,278	-
Complete	P.04.05.03.02 / ORNL - Design - New Injection Dump Quadrupole Magnet & Power Supply Cooling	-	-	-	-	-	332	332	332	-	1.00	0	1.00	332	332	-
	P.04.05.03.03 / ORNL - Procure/Fab/Installation - New Injection Dump Quadrupole Magnet & Power Supply Cooling	-	-	-	-	-	-	-	-	-	-	0	-	888	888	-
	P.04.05.03.05 / ORNL - Testing - New Injection Dump Quadrupole Magnet & Power Supply Cooling	-	-	-	-	-	-	-	-	-	-	0	-	57	57	-
	P.04.05.04 - PFN Room HVAC	-	-	-	-	-	42	42	33	-	1.00	9	1.27	315	306	9
Complete	P.04.05.04.02 / ORNL - Design - PFN Room Cooling	-	-	-	-	-	42	42	33	-	1.00	9	1.27	42	33	9
	P.04.05.04.03 / ORNL - Procure/Fab - PFN Room Cooling	-	-	-	-	-	-	-	-	-	-	0	-	10	10	-
	P.04.05.04.04 / ORNL - Installation - PFN Room Cooling	-	-	-	-	-	-	-	-	-	-	0	-	263	263	-
	<b>P.04.06 - Ring Control Systems</b>	306	166	171	(140)	(4)	3,512	2,896	3,182	(617)	0.82	(286)	0.91	5,883	6,174	(291)
	P.04.06.01 - Management and System Integration	6	6	1	-	6	92	92	59	-	1.00	33	1.55	250	218	33
	P.04.06.01.01 / ORNL - Management and System Integration - Ring Control Systems	6	6	1	-	6	92	92	59	-	1.00	33	1.55	250	218	33
	P.04.06.02 - Beam Power Limit System	281	153	169	(128)	(15)	3,271	2,661	2,986	(610)	0.81	(325)	0.89	5,089	5,419	(330)
	P.04.06.02.02 / ORNL - Design - Beam Power Limit System	281	138	169	(143)	(30)	3,271	2,647	2,986	(625)	0.81	(339)	0.89	4,073	4,423	(349)
	P.04.06.02.03 / ORNL - Procure/Fab - Beam Power Limit System	-	15	-	15	15	-	15	-	15	-	15	-	659	640	19
	P.04.06.02.04 / ORNL - Installation - Beam Power Limit System	-	-	-	-	-	-	-	-	-	-	0	-	199	199	-
	P.04.06.02.05 / ORNL - Testing and Certification - Beam Power Limit System	-	-	-	-	-	-	-	-	-	-	0	-	157	157	-
	P.04.06.03 - Personnel Protection System	17	7	1	(10)	6	113	108	102	(5)	0.96	6	1.05	340	333	7
	P.04.06.03.02 / ORNL - Design - Personnel Protection System	17	7	1	(10)	6	113	108	102	(5)	0.96	6	1.05	156	151	5
	P.04.06.03.03 / ORNL - Procure/Fab - Personnel Protection System	-	-	-	-	-	-	-	-	-	-	0	-	130	129	1
	P.04.06.03.04 / ORNL - Installation - Personnel Protection System	-	-	-	-	-	-	-	-	-	-	0	-	53	53	0
	P.04.06.04 - Ring Injection Section Controls	2	-	-	(2)	-	36	34	34	(2)	0.94	0	1.00	180	180	0
	P.04.06.04.02 / ORNL - Design - Ring Injection Section Controls	2	-	-	(2)	-	36	34	34	(2)	0.94	0	1.00	37	37	0
	P.04.06.04.03 / ORNL - Procure/Fab - Ring Injection Section Controls	-	-	-	-	-	-	-	-	-	-	0	-	92	92	-
	P.04.06.04.04 / ORNL - Installation - Ring Injection Section Controls	-	-	-	-	-	-	-	-	-	-	0	-	51	51	-
	P.04.06.05 - Ring Extraction Section Controls	-	-	-	-	-	-	-	-	-	-	0	-	23	23	-
	P.04.06.05.04 / ORNL - Installation - Ring Injection Section Controls	-	-	-	-	-	-	-	-	-	-	0	-	23	23	-
	<b>P.04.07 - RTBT Stub</b>	-	-	-	-	-	35	35	35	-	1.00	0	1.00	165	165	-
	P.04.07.02 - RTBT Stub Temporary Shielding	-	-	-	-	-	1	1	1	-	1.00	0	1.00	131	131	-
Complete	P.04.07.02.02 / ORNL - Design - RTBT Stub Temporary Shielding	-	-	-	-	-	1	1	1	-	1.00	0	1.00	1	1	-
	P.04.07.02.04 / ORNL - Installation - RTBT Stub Temporary Shielding	-	-	-	-	-	-	-	-	-	-	0	-	130	130	-
	P.04.07.03 - RTBT Stub Earth Berm Shielding	-	-	-	-	-	34	34	34	-	1.00	0	1.00	34	34	-
Complete	P.04.07.03.02 / ORNL - Design - RTBT Stub Earth Berm Shielding	-	-	-	-	-	34	34	34	-	1.00	0	1.00	34	34	-
	<b>P.04.08 - Accelerator Physics</b>	2	2	2	-	(0)	47	47	41	-	1.00	5	1.13	107	102	5
	P.04.08.01 - Accelerator Physics	2	2	2	-	(0)	47	47	41	-	1.00	5	1.13	107	102	5
	P.04.08.01.02 / ORNL - Design - Accelerator Physics	2	2	2	-	(0)	47	47	41	-	1.00	5	1.13	107	102	5
	<b>P.05 - First Target Station Systems</b>	566	668	1,249	101	(581)	17,584	16,463	17,031	(1,120)	0.94	(567)	0.97	34,544	35,119	(575)
	<b>P.05.01 - Management and System Integration</b>	36	36	30	-	6	1,083	1,083	1,084	-	1.00	(1)	1.00	2,798	2,799	(1)
	P.05.01.01 - Management and System Integration - First Target Station Systems	36	36	30	-	6	1,083	1,083	1,084	-	1.00	(1)	1.00	2,798	2,799	(1)
	P.05.01.01 / ORNL - Management and System Integration - First Target Station Systems	36	36	30	-	6	1,083	1,083	1,084	-	1.00	(1)	1.00	2,798	2,799	(1)
Complete	<b>P.05.02 - Neutronics</b>	-	-	-	-	-	473	473	474	-	1.00	(1)	1.00	473	474	(1)
	P.05.02.01 - Management and System Integration	-	-	-	-	-	101	101	101	-	1.00	(1)	0.99	101	101	(1)
Complete	P.05.02.01.01 / ORNL - Management and System Integration - Neutronics	-	-	-	-	-	101	101	101	-	1.00	(1)	0.99	101	101	(1)
	P.05.02.02 - Evaluations at 1.3 GeV (Neutronics)	-	-	-	-	-	262	262	262	-	1.00	0	1.00	262	262	-
Complete	P.05.02.02.02 / ORNL - Design - Evaluations at 1.3 GeV (Neutronics)	-	-	-	-	-	262	262	262	-	1.00	0	1.00	262	262	-
	P.05.02.03 - System Design Support	-	-	-	-	-	9	9	9	-	1.00	0	1.00	9	9	-



May 2021 (\$k)		CURRENT PERIOD					CUMULATIVE TO DATE							AT COMPLETE		
		BCWS	BCWP	ACWP	VARIANCE		BCWS	BCWP	ACWP	VARIANCE				BAC	EAC	VAC
					SV	CV				SV	SPI	CV	CPI			
Status	ITEM															
Complete	P.05.02.03.02 / ORNL - Design - System Design Support	-	-	-	-	-	9	9	9	-	1.00	0	1.00	9	9	-
	P.05.02.04 - FTS Source Performance	-	-	-	-	-	97	97	97	-	1.00	0	1.00	97	97	-
Complete	P.05.02.04.02 / ORNL - Design - FTS Source Performance	-	-	-	-	-	97	97	97	-	1.00	0	1.00	97	97	-
	P.05.02.05 - FTS Facility Support	-	-	-	-	-	5	5	5	-	1.00	0	1.00	5	5	-
Complete	P.05.02.05.02 / ORNL - Design - FTS Facility Support	-	-	-	-	-	5	5	5	-	1.00	0	1.00	5	5	-
	<b>P.05.03 - Mercury Process Systems</b>	<b>49</b>	<b>16</b>	<b>78</b>	<b>(33)</b>	<b>(62)</b>	<b>1,828</b>	<b>1,720</b>	<b>1,953</b>	<b>(107)</b>	<b>0.94</b>	<b>(233)</b>	<b>0.88</b>	<b>2,496</b>	<b>2,729</b>	<b>(233)</b>
	P.05.03.01 - Management and System Integration	1	1	1	-	0	131	131	133	-	1.00	(3)	0.98	234	237	(3)
	P.05.03.01.01 / ORNL - Management and System Integration - Mercury Process Systems	1	1	1	-	0	131	131	133	-	1.00	(3)	0.98	234	237	(3)
	P.05.03.02 - Evaluations at 1.3 GeV (Mercury Process Systems)	-	-	-	-	-	43	43	43	-	1.00	0	1.00	43	43	-
Complete	P.05.03.02.02 / ORNL - Design - Evaluations at 1.3 GeV (Mercury Process Systems)	-	-	-	-	-	43	43	43	-	1.00	0	1.00	43	43	-
	P.05.03.03 - Hg Pump Tank Overflow	15	7	12	(8)	(6)	514	474	538	(40)	0.92	(64)	0.88	997	1,062	(64)
	P.05.03.03.02 / ORNL - Design - Hg Pump Tank Overflow	15	7	12	(8)	(6)	514	474	538	(40)	0.92	(64)	0.88	514	578	(64)
	P.05.03.03.03 / ORNL - Procure/Fab - Hg Pump Tank Overflow	-	-	-	-	-	-	-	-	-		0		469	469	(0)
	P.05.03.03.04 / ORNL - Installation - Hg Pump Tank Overflow	-	-	-	-	-	-	-	-	-		0		15	15	-
	P.05.03.04 - Hg Return GLS	20	-	61	(20)	(61)	1,041	977	1,168	(64)	0.94	(192)	0.84	1,073	1,264	(192)
	P.05.03.04.02 / ORNL - Design - Hg Return GLS	20	-	61	(20)	(61)	1,041	977	1,168	(64)	0.94	(192)	0.84	1,073	1,264	(192)
	P.05.03.05 - In-Cell Target Gas Supply Hardware	13	8	3	(5)	5	99	96	70	(3)	0.97	26	1.37	148	122	26
	P.05.03.05.02 / ORNL - Design - In-Cell Target Gas Supply Hardware	13	8	3	(5)	5	99	96	70	(3)	0.97	26	1.37	99	73	26
	P.05.03.05.03 / ORNL - Procure/Fab - In-Cell Target Gas Supply Hardware	-	-	-	-	-	-	-	-	-		0		35	35	(0)
	P.05.03.05.04 / ORNL - Installation - In-Cell Target Gas Supply Hardware	-	-	-	-	-	-	-	-	-		0		14	14	-
	<b>P.05.04 - Moderator Cryogenic Systems</b>	<b>9</b>	<b>18</b>	<b>7</b>	<b>8</b>	<b>10</b>	<b>1,448</b>	<b>1,336</b>	<b>1,410</b>	<b>(112)</b>	<b>0.92</b>	<b>(74)</b>	<b>0.95</b>	<b>2,513</b>	<b>2,590</b>	<b>(77)</b>
	P.05.04.01 - Management and System Integration	9	9	0	-	9	234	234	212	-	1.00	22	1.11	612	590	22
	P.05.04.01.01 / ORNL - Management and System Integration - Moderator Cryogenic Systems	9	9	0	-	9	234	234	212	-	1.00	22	1.11	612	590	22
	P.05.04.02 - Ortho-Para Hydrogen Converters	-	1	6	1	(6)	548	545	649	(3)	0.99	(103)	0.84	955	1,058	(103)
Complete	P.05.04.02.02 / ORNL - Design - Ortho-Para Hydrogen Converters	-	-	3	-	(3)	523	523	581	-	1.00	(59)	0.90	523	581	(59)
	P.05.04.02.03 / ORNL - Procure/Fab - Ortho-Para Hydrogen Converters	-	1	3	1	(2)	25	23	67	(3)	0.89	(45)	0.34	278	322	(45)
	P.05.04.02.04 / ORNL - Installation - Ortho-Para Hydrogen Converters	-	-	-	-	-	-	-	-	-		0		154	154	-
	P.05.04.03 - Ortho-Para Hydrogen Converter Diagnostics	-	8	-	8	8	432	419	409	(12)	0.97	10	1.02	587	577	10
	P.05.04.03.02 / ORNL - Design - Ortho-Para Hydrogen Converter Diagnostics	-	6	-	6	6	415	407	409	(9)	0.98	(3)	0.99	415	418	(3)
	P.05.04.03.03 / ORNL - Procure/Fab - Ortho-Para Hydrogen Converter Diagnostics	-	2	-	2	2	16	13	0	(4)	0.78	12	34.62	167	154	12
	P.05.04.03.04 / ORNL - Installation - Ortho-Para Hydrogen Converter Diagnostics	-	-	-	-	-	-	-	-	-		0		5	5	-
	P.05.04.04 - Hydrogen Refill System Expansion and Relocation	-	-	1	-	(1)	235	137	141	(97)	0.59	(3)	0.98	359	365	(6)
Complete	P.05.04.04.02 / ORNL - Design - Hydrogen Refill System Expansion and Relocation	-	-	0	-	(0)	137	137	140	-	1.00	(3)	0.98	137	140	(3)
	P.05.04.04.03 / ORNL - Procure/Fab - Hydrogen Refill System Expansion and Relocation	-	-	0	-	(0)	98	1	0	(97)	0.01	0	2.98	98	100	(2)
	P.05.04.04.04 / ORNL - Installation - Hydrogen Refill System Expansion and Relocation	-	-	-	-	-	-	-	-	-		0		125	125	-
Complete	<b>P.05.05 - Vessel and Shielding Systems</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>446</b>	<b>446</b>	<b>446</b>	<b>-</b>	<b>1.00</b>	<b>0</b>	<b>1.00</b>	<b>446</b>	<b>446</b>	<b>-</b>
	P.05.05.01 - Management and System Integration	-	-	-	-	-	147	147	147	-	1.00	0	1.00	147	147	-
Complete	P.05.05.01.01 / ORNL - Management and System Integration - Vessel and Shielding Systems	-	-	-	-	-	147	147	147	-	1.00	0	1.00	147	147	-
	P.05.05.02 - Evaluations at 1.3 GeV (Vessel and Shielding Systems)	-	-	-	-	-	299	299	299	-	1.00	0	1.00	299	299	-
Complete	P.05.05.02.02 / ORNL - Design - Evaluations at 1.3 GeV (Vessel and Shielding Systems)	-	-	-	-	-	299	299	299	-	1.00	0	1.00	299	299	-
	<b>P.05.06 - Target Utility Systems</b>	<b>240</b>	<b>203</b>	<b>118</b>	<b>(38)</b>	<b>85</b>	<b>2,010</b>	<b>1,687</b>	<b>1,309</b>	<b>(323)</b>	<b>0.84</b>	<b>378</b>	<b>1.29</b>	<b>3,819</b>	<b>3,439</b>	<b>379</b>
	P.05.06.01 - Management and System Integration	1	1	1	-	1	208	208	215	-	1.00	(7)	0.97	289	296	(7)
	P.05.06.01.01 / ORNL - Management and System Integration - Target Utility Systems	1	1	1	-	1	208	208	215	-	1.00	(7)	0.97	289	296	(7)
	P.05.06.02 - Evaluations at 1.3 GeV (Target Utility Systems)	-	-	-	-	-	75	75	75	-	1.00	0	1.00	75	75	-
Complete	P.05.06.02.02 / ORNL - Design - Evaluations at 1.3 GeV (Target Utility Systems)	-	-	-	-	-	75	75	75	-	1.00	0	1.00	75	75	-
	P.05.06.03 - Upgrades for 1.3 GeV systems	-	-	-	-	-	5	5	5	-	1.00	0	1.00	5	5	-
Complete	P.05.06.03.02 / ORNL - Design - Upgrades for 1.3 GeV Systems	-	-	-	-	-	5	5	5	-	1.00	0	1.00	5	5	-
	P.05.06.04 - Upgrades for Gas Injection	239	201	117	(38)	84	1,721	1,398	1,014	(323)	0.81	385	1.38	3,449	3,063	386
	P.05.06.04.02 / ORNL - Design - Upgrades for Gas Injection	166	156	101	(10)	55	1,460	1,310	985	(150)	0.90	325	1.33	1,707	1,381	326
	P.05.06.04.03 / ORNL - Procure/Fab - Upgrades for Gas Injection	55	41	12	(14)	29	178	84	25	(94)	0.47	59	3.40	1,088	1,028	60
	P.05.06.04.04 / ORNL - Installation - Upgrades for Gas Injection	18	4	4	(14)	1	83	4	4	(79)	0.05	1	1.18	654	654	0
Complete	<b>P.05.07 - Instrument Systems</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>40</b>	<b>40</b>	<b>40</b>	<b>-</b>	<b>1.00</b>	<b>0</b>	<b>1.00</b>	<b>40</b>	<b>40</b>	<b>-</b>
	P.05.07.01 - Management and System Integration	-	-	-	-	-	40	40	40	-	1.00	0	1.00	40	40	-
Complete	P.05.07.01.01 / ORNL - Management and System Integration - Instrument Systems	-	-	-	-	-	40	40	40	-	1.00	0	1.00	40	40	-
	<b>P.05.08 - MOTS</b>	<b>79</b>	<b>307</b>	<b>260</b>	<b>228</b>	<b>46</b>	<b>694</b>	<b>803</b>	<b>768</b>	<b>109</b>	<b>1.16</b>	<b>35</b>	<b>1.05</b>	<b>2,065</b>	<b>2,030</b>	<b>35</b>
	P.05.08.01 - Management and System Integration	4	4	7	-	(3)	176	176	210	-	1.00	(34)	0.84	397	431	(34)
	P.05.08.01.01 / ORNL - Management and System Integration - MOTS	4	4	7	-	(3)	176	176	210	-	1.00	(34)	0.84	397	431	(34)
	P.05.08.02 - Additional MOTS Delay Bed	-	251	235	251	16	54	306	305	252	5.70	1	1.00	347	346	1
Complete	P.05.08.02.02 / ORNL - Design - Additional MOTS Delay Bed	-	-	-	-	-	26	26	26	-	1.00	0	1.00	26	26	-
	P.05.08.02.03 / ORNL - Procure/Fab - Additional MOTS Delay Bed	-	231	233	231	(2)	28	259	274	231	9.38	(15)	0.94	259	274	(15)
	P.05.08.02.04 / ORNL - Installation - Additional MOTS Delay Bed	-	19	2	19	18	-	21	4	21		16	4.78	62	46	16
	P.05.08.03 - MOTS Upgrades for Gas Injection	74	51	17	(23)	34	332	204	164	(128)	0.61	40	1.24	937	897	40
	P.05.08.03.02 / ORNL - Design - MOTS Upgrades for Gas Injection	74	51	17	(23)	34	325	203	164	(122)	0.62	39	1.24	351	311	39
	P.05.08.03.03 / ORNL - Procure/Fab - MOTS Upgrades for Gas Injection	-	0	-	0	0	6	1	0	(6)	0.09	0	2.77	449	450	(1)

May 2021 (\$k)		CURRENT PERIOD					CUMULATIVE TO DATE							AT COMPLETE		
		BCWS	BCWP	ACWP	VARIANCE		BCWS	BCWP	ACWP	VARIANCE				BAC	EAC	VAC
					SV	CV				SV	SPI	CV	CPI			
Status	ITEM															
	P.05.08.03.04 / ORNL - Installation - MOTS Upgrades for Gas Injection	-	-	-	-	-	-	-	-	-	-	0		137	136	1
	P.05.08.04 - MOTS Cold Trap and Shielding	-	0	0	0	(0)	133	118	90	(15)	0.88	28	1.31	384	356	28
Complete	P.05.08.04.02 / ORNL - Design - MOTS Cold Trap and Shielding	-	-	-	-	-	90	90	78	-	1.00	12	1.15	90	78	12
	P.05.08.04.03 / ORNL - Procure/Fab - MOTS Cold Trap and Shielding	-	0	0	0	(0)	32	16	12	(15)	0.51	5	1.39	228	223	5
	P.05.08.04.04 / ORNL - Installation - MOTS Cold Trap and Shielding	-	-	-	-	-	11	11	0	-	1.00	11	0.97	66	54	11
	<b>P.05.09 - 2 MW Target</b>	<b>123</b>	<b>81</b>	<b>667</b>	<b>(41)</b>	<b>(585)</b>	<b>6,665</b>	<b>6,459</b>	<b>7,044</b>	<b>(205)</b>	<b>0.97</b>	<b>(584)</b>	<b>0.92</b>	<b>15,103</b>	<b>15,688</b>	<b>(586)</b>
	P.05.09.01 - Management and System Integration	39	39	27	-	12	305	305	180	-	1.00	125	1.70	1,538	1,413	125
	P.05.09.01.01 / ORNL - Management and System Integration - 2 MW Target	39	39	27	-	12	305	305	180	-	1.00	125	1.70	1,538	1,413	125
	P.05.09.02 - Target Module	-	-	0	-	(0)	3,925	3,991	3,998	65	1.02	(8)	1.00	8,380	8,388	(8)
Complete	P.05.09.02.01.02 / ORNL - Design - Mercury Vessel (MV)	-	-	0	-	(0)	2,410	2,410	2,407	-	1.00	3	1.00	2,410	2,407	3
Complete	P.05.09.02.02.02 / ORNL - Design - Bolt on Shroud (BOS)	-	-	-	-	-	109	109	109	-	1.00	0	1.00	109	109	-
	P.05.09.02.03.03 / ORNL - Procure/Fab - Target Module Assembly	-	-	0	-	(0)	1,407	1,472	1,483	65	1.05	(11)	0.99	5,685	5,696	(11)
	P.05.09.02.03.04 / ORNL - Installation - Target Module Assembly	-	-	-	-	-	-	-	-	-	-	0	-	176	176	-
	P.05.09.03 - Supporting Hardware	8	-	6	(8)	(6)	42	18	10	(24)	0.43	8	1.86	42	34	8
	P.05.09.03.02 / ORNL - Design - Supporting Hardware	-	-	6	-	(6)	17	14	6	(4)	0.79	8	2.35	17	10	8
	P.05.09.03.03 / ORNL - Procure/Fab - Supporting Hardware	8	-	-	(8)	-	25	4	4	(21)	0.17	0	1.11	25	25	0
	P.05.09.04 - PPU Test Target	76	43	634	(34)	(591)	2,392	2,146	2,856	(246)	0.90	(710)	0.75	5,143	5,854	(711)
	P.05.09.04.02 / ORNL - Design - PPU Test Target	76	43	634	(34)	(591)	2,392	2,146	2,856	(246)	0.90	(710)	0.75	5,143	5,854	(711)
	<b>P.05.10 - Safety, Controls and Operations</b>	<b>30</b>	<b>7</b>	<b>81</b>	<b>(22)</b>	<b>(74)</b>	<b>1,284</b>	<b>825</b>	<b>1,050</b>	<b>(460)</b>	<b>0.64</b>	<b>(225)</b>	<b>0.79</b>	<b>3,180</b>	<b>3,410</b>	<b>(230)</b>
	P.05.10.01 - Management and System Integration	2	2	0	-	2	67	67	64	-	1.00	3	1.04	152	149	3
	P.05.10.01.01 / ORNL - Management and System Integration - Safety, Controls and Operations	2	2	0	-	2	67	67	64	-	1.00	3	1.04	152	149	3
	P.05.10.02 - System Integration for Safety Authorization	-	-	-	-	-	433	433	422	-	1.00	10	1.02	503	492	10
	P.05.10.02.02 / ORNL - Design - System Integration for Safety Authorization	-	-	-	-	-	433	433	422	-	1.00	10	1.02	503	492	10
	P.05.10.03 - Controls Integration	28	7	81	(20)	(74)	787	328	564	(460)	0.42	(236)	0.58	2,387	2,628	(241)
	P.05.10.03.02 / ORNL - Design - Controls Integration	26	7	81	(18)	(74)	759	328	559	(432)	0.43	(231)	0.59	1,273	1,509	(236)
	P.05.10.03.03 / ORNL - Procure/Fab - Controls Integration	0	-	-	(0)	-	0	-	5	(0)	0.00	(5)	0.00	200	206	(6)
	P.05.10.03.04 / ORNL - Installation - Controls Integration	2	-	-	(2)	-	28	-	-	(28)	0.00	0	-	914	912	1
	P.05.10.04 - Operating Procedures and Training	-	(2)	-	(2)	(2)	(2)	(2)	-	-	1.00	(2)	-	138	140	(2)
	P.05.10.04.02 / ORNL - Design - Operating Procedures and Training	-	(2)	-	(2)	(2)	(2)	(2)	-	-	1.00	(2)	-	138	140	(2)
	<b>P.05.11 - Gas Injection Development</b>	<b>-</b>	<b>-</b>	<b>7</b>	<b>-</b>	<b>(7)</b>	<b>1,613</b>	<b>1,591</b>	<b>1,453</b>	<b>(22)</b>	<b>0.99</b>	<b>138</b>	<b>1.09</b>	<b>1,613</b>	<b>1,475</b>	<b>138</b>
	P.05.11.01 - Management and System Integration - Gas Injection Development	-	-	0	-	(0)	29	29	25	-	1.00	4	1.16	29	25	4
Complete	P.05.11.01 / ORNL - Management and System Integration	-	-	0	-	(0)	29	29	25	-	1.00	4	1.16	29	25	4
	P.05.11.02 - Gas Injection	-	-	7	-	(7)	1,584	1,563	1,428	(22)	0.99	134	1.09	1,584	1,450	134
	P.05.11.02.02 / ORNL - Design	-	-	7	-	(7)	1,584	1,563	1,428	(22)	0.99	134	1.09	1,584	1,450	134
	<b>P.06 - Conventional Facilities</b>	<b>22</b>	<b>55</b>	<b>57</b>	<b>33</b>	<b>(2)</b>	<b>2,758</b>	<b>2,772</b>	<b>2,846</b>	<b>13</b>	<b>1.00</b>	<b>(74)</b>	<b>0.97</b>	<b>10,900</b>	<b>10,974</b>	<b>(75)</b>
	<b>P.06.01 - Management and System Integration</b>	<b>6</b>	<b>6</b>	<b>3</b>	<b>-</b>	<b>3</b>	<b>173</b>	<b>173</b>	<b>161</b>	<b>-</b>	<b>1.00</b>	<b>12</b>	<b>1.07</b>	<b>309</b>	<b>297</b>	<b>12</b>
	P.06.01.01 - Management and System Integration - Conventional Facilities	6	6	3	-	3	173	173	161	-	1.00	12	1.07	309	297	12
	P.06.01.01 / ORNL - Management and System Integration - Conventional Facilities	6	6	3	-	3	173	173	161	-	1.00	12	1.07	309	297	12
	<b>P.06.02 - Building Modifications</b>	<b>16</b>	<b>49</b>	<b>54</b>	<b>33</b>	<b>(5)</b>	<b>2,586</b>	<b>2,599</b>	<b>2,685</b>	<b>13</b>	<b>1.01</b>	<b>(86)</b>	<b>0.97</b>	<b>10,591</b>	<b>10,677</b>	<b>(86)</b>
	P.06.02.01 - Klystron Gallery Building Modifications	7	7	9	-	(2)	1,734	1,734	1,759	-	1.00	(25)	0.99	1,749	1,774	(25)
	P.06.02.01.01 / ORNL - Management and System Integration - Klystron Gallery Building Modifications	7	7	9	-	(2)	307	307	334	-	1.00	(27)	0.92	322	349	(27)
Complete	P.06.02.01.02 / ORNL - Design - Klystron Gallery Building Modifications	-	-	-	-	-	1,427	1,427	1,425	-	1.00	2	1.00	1,427	1,425	2
	P.06.02.02 - RTBT Modifications	1	1	1	-	(0)	730	730	723	-	1.00	7	1.01	8,628	8,621	7
	P.06.02.02.01 / ORNL - Management and System Integration - RTBT Modifications	1	1	1	-	(0)	60	60	62	-	1.00	(1)	0.98	174	176	(1)
Complete	P.06.02.02.02 / ORNL - Design - RTBT Modifications	-	-	-	-	-	670	670	661	-	1.00	9	1.01	670	661	9
	P.06.02.02.03.01 / ORNL - Procure/Fab - RTBT Modifications (Non-LOE)	-	-	-	-	-	-	-	-	-	-	0	-	6,689	6,688	0
	P.06.02.02.03.02 / ORNL - Procure/Fab - RTBT Modifications (LOE)	-	-	-	-	-	-	-	-	-	-	0	-	1,095	1,095	(1)
	P.06.02.03 - Facility DI Water and HVAC Controls	8	41	44	33	(3)	122	135	203	13	1.11	(68)	0.66	214	283	(68)
	P.06.02.03.01 / ORNL - Management and System Integration - Facility DI Water and HVAC Controls	1	1	(5)	-	6	71	71	95	-	1.00	(24)	0.75	85	109	(24)
	P.06.02.03.02 / ORNL - Design - Facility DI Water and HVAC Controls	7	3	-	(5)	3	31	18	17	(13)	0.59	2	1.10	58	56	2
	P.06.02.03.03 / ORNL - Procure/Fab - Facility DI Water and HVAC Controls	-	-	-	-	-	-	-	-	-	-	0	-	14	14	-
	P.06.02.03.04 / ORNL - Installation - Facility DI Water and HVAC Controls	-	38	49	38	(11)	20	45	91	26	2.31	(46)	0.50	57	103	(46)
	<b>P.07 - R&amp;D</b>	<b>-</b>	<b>48</b>	<b>48</b>	<b>48</b>	<b>(0)</b>	<b>2,267</b>	<b>2,315</b>	<b>2,328</b>	<b>48</b>	<b>1.02</b>	<b>(13)</b>	<b>0.99</b>	<b>2,476</b>	<b>2,488</b>	<b>(12)</b>
Complete	<b>P.07.01 - Gas Injection Development</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1,992</b>	<b>1,992</b>	<b>1,992</b>	<b>-</b>	<b>1.00</b>	<b>0</b>	<b>1.00</b>	<b>1,992</b>	<b>1,992</b>	<b>-</b>
	P.07.01.01 - Management and System Integration - Gas Injection Development	-	-	-	-	-	13	13	13	-	1.00	0	1.00	13	13	-
Complete	P.07.01.01 / ORNL - Management and System Integration - Gas Injection Development	-	-	-	-	-	13	13	13	-	1.00	0	1.00	13	13	-
	P.07.01.03 - Gas Injection in Mercury	-	-	-	-	-	1,979	1,979	1,979	-	1.00	0	1.00	1,979	1,979	-
Complete	P.07.01.03 / ORNL - Gas Injection in Mercury	-	-	-	-	-	1,979	1,979	1,979	-	1.00	0	1.00	1,979	1,979	-
	<b>P.07.02 - Foil Development</b>	<b>-</b>	<b>48</b>	<b>48</b>	<b>48</b>	<b>(0)</b>	<b>276</b>	<b>324</b>	<b>336</b>	<b>48</b>	<b>1.17</b>	<b>(13)</b>	<b>0.96</b>	<b>484</b>	<b>497</b>	<b>(12)</b>
	P.07.02.02 - Design - Foil Development	-	48	48	48	(0)	276	324	336	48	1.17	(13)	0.96	484	497	(12)
	P.07.02.02 / ORNL - Design - Foil Development	-	48	48	48	(0)	276	324	336	48	1.17	(13)	0.96	484	497	(12)
	<b>P.08 - Pre-Ops</b>	<b>4</b>	<b>4</b>	<b>3</b>	<b>-</b>	<b>2</b>	<b>87</b>	<b>87</b>	<b>76</b>	<b>-</b>	<b>1.00</b>	<b>10</b>	<b>1.14</b>	<b>1,137</b>	<b>1,127</b>	<b>10</b>
	<b>P.08.01 - Commissioning</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0</b>	<b>-</b>	<b>933</b>	<b>934</b>	<b>(0)</b>
	P.08.01.01 - Commission PPU Components with Beam	-	-	-	-	-	-	-	-	-	-	0	-	933	934	(0)

May 2021 (\$k)		CURRENT PERIOD					CUMULATIVE TO DATE							AT COMPLETE			
Status	ITEM	BCWS	BCWP	ACWP	VARIANCE		BCWS	BCWP	ACWP	VARIANCE				BAC	EAC	VAC	
					SV	CV				SV	SPI	CV	CPI				
	P.08.01.01.05 / ORNL - Commissioning and Pre-Ops	-	-	-	-	-	-	-	-	-	-	0	1.00	1.00	933	934	(0)
	<b>P.08.03 - Regulatory Compliance</b>	<b>4</b>	<b>4</b>	<b>3</b>	-	<b>2</b>	<b>87</b>	<b>87</b>	<b>76</b>	-	<b>1.00</b>	10	<b>1.14</b>	<b>204</b>	<b>193</b>	<b>10</b>	
	P.08.03.03 - ARR Planning	4	4	3	-	2	87	87	76	-	1.00	10	1.14	204	193	10	
	P.08.03.03.01 / ORNL - Management and System Integration	4	4	3	-	2	87	87	76	-	1.00	10	1.14	204	193	10	
<b>Complete</b>	<b>P.09 - Pre-CD-1 Activities</b>	-	-	-	-	-	<b>7,250</b>	<b>7,250</b>	<b>7,250</b>	-	<b>1.00</b>	0	<b>1.00</b>	<b>7,250</b>	<b>7,250</b>	-	
<b>Complete</b>	<b>P.09.01 - Pre-CD-1 Activities</b>	-	-	-	-	-	<b>7,250</b>	<b>7,250</b>	<b>7,250</b>	-	<b>1.00</b>	0	<b>1.00</b>	<b>7,250</b>	<b>7,250</b>	-	
	P.09.01.01 - FY16-FY18 P.01 Activities	-	-	-	-	-	1,562	1,562	1,562	-	1.00	0	1.00	1,562	1,562	-	
<b>Complete</b>	<b>P.09.01.01 / ORNL - FY16-FY18 P.01 Activities</b>	-	-	-	-	-	1,562	1,562	1,562	-	1.00	0	1.00	1,562	1,562	-	
	P.09.01.02 - FY16-FY18 P.02 Activities	-	-	-	-	-	674	674	674	-	1.00	0	1.00	674	674	-	
<b>Complete</b>	<b>P.09.01.02 / ORNL - FY16-FY18 P.02 Activities</b>	-	-	-	-	-	674	674	674	-	1.00	0	1.00	674	674	-	
	P.09.01.03 - FY16-FY18 P.03 Activities	-	-	-	-	-	1,461	1,461	1,461	-	1.00	0	1.00	1,461	1,461	-	
<b>Complete</b>	<b>P.09.01.03 / ORNL - FY16-FY18 P.03 Activities</b>	-	-	-	-	-	1,461	1,461	1,461	-	1.00	0	1.00	1,461	1,461	-	
	P.09.01.04 - FY16-FY18 P.04 Activities	-	-	-	-	-	605	605	605	-	1.00	0	1.00	605	605	-	
<b>Complete</b>	<b>P.09.01.04 / ORNL - FY16-FY18 P.04 Activities</b>	-	-	-	-	-	605	605	605	-	1.00	0	1.00	605	605	-	
	P.09.01.05 - FY16-FY18 P.05 Activities	-	-	-	-	-	2,184	2,184	2,184	-	1.00	0	1.00	2,184	2,184	-	
<b>Complete</b>	<b>P.09.01.05 / ORNL - FY16-FY18 P.05 Activities</b>	-	-	-	-	-	2,184	2,184	2,184	-	1.00	0	1.00	2,184	2,184	-	
	P.09.01.06 - FY16-FY18 P.06 Activities	-	-	-	-	-	629	629	629	-	1.00	0	1.00	629	629	-	
<b>Complete</b>	<b>P.09.01.06 / ORNL - FY16-FY18 P.06 Activities</b>	-	-	-	-	-	629	629	629	-	1.00	0	1.00	629	629	-	
	P.09.01.07 - FY16-FY18 P.07 Activities	-	-	-	-	-	135	135	135	-	1.00	0	1.00	135	135	-	
<b>Complete</b>	<b>P.09.01.07 / ORNL - FY16-FY18 P.07 Activities</b>	-	-	-	-	-	135	135	135	-	1.00	0	1.00	135	135	-	
	<b>P.10 - Long Lead Procurements</b>	<b>382</b>	<b>536</b>	<b>613</b>	<b>154</b>	<b>(76)</b>	<b>43,007</b>	<b>40,108</b>	<b>39,554</b>	<b>(2,899)</b>	<b>0.93</b>	554	<b>1.01</b>	<b>49,785</b>	<b>49,346</b>	<b>438</b>	
	<b>P.10.02 - SCL Systems</b>	<b>22</b>	<b>50</b>	<b>302</b>	<b>28</b>	<b>(252)</b>	<b>19,737</b>	<b>18,294</b>	<b>17,981</b>	<b>(1,443)</b>	<b>0.93</b>	314	<b>1.02</b>	<b>19,848</b>	<b>19,535</b>	<b>313</b>	
	P.10.02.01 - Cavities & Material Scanning LLP	-	-	116	-	(116)	6,895	6,617	6,661	(278)	0.96	(44)	0.99	6,895	6,939	(44)	
	P.10.02.01.03 / ORNL - Procure/Fab - Cavities & Material Scanning LLP	-	-	116	-	(116)	6,895	6,617	6,661	(278)	0.96	(44)	0.99	6,895	6,939	(44)	
	P.10.02.02 - VTA Qualification Hardware LLP	-	-	-	-	-	189	189	189	-	1.00	0	1.00	189	189	-	
<b>Complete</b>	<b>P.10.02.02.03 / ORNL - Procure/Fab - VTA Qualification Hardware LLP</b>	-	-	-	-	-	189	189	189	-	1.00	0	1.00	189	189	-	
	P.10.02.04 - Couplers LLP	-	-	-	-	-	1,288	1,257	1,322	(31)	0.98	(64)	0.95	1,288	1,353	(65)	
	P.10.02.04.03 / ORNL - Procure/Fab - Couplers LLP	-	-	-	-	-	1,288	1,257	1,322	(31)	0.98	(64)	0.95	1,288	1,353	(65)	
	P.10.02.05 - Couplers Acquisition	-	-	(0)	-	0	374	374	318	-	1.00	57	1.18	374	318	57	
<b>Complete</b>	<b>P.10.02.05.03 / ORNL - Procure/Fab - Coupler Acquisition</b>	-	-	(0)	-	0	374	374	318	-	1.00	57	1.18	374	318	57	
	P.10.02.07 - Cryomodule Integration (Partner Laboratory Scope)	22	50	182	28	(132)	10,045	8,912	8,677	(1,134)	0.89	235	1.03	10,157	9,922	235	
	P.10.02.07.03 / JLAB - Procure/Fab - Cryomodule Integration (Partner Laboratory Scope)	22	50	182	28	(132)	10,045	8,912	8,677	(1,134)	0.89	235	1.03	10,157	9,922	235	
	P.10.02.08 - Cryomodule Testing	-	-	-	-	-	26	26	24	-	1.00	2	1.09	26	24	2	
<b>Complete</b>	<b>P.10.02.08.03 / ORNL - Procure/Fab - Cryomodule Testing</b>	-	-	-	-	-	26	26	24	-	1.00	2	1.09	26	24	2	
	P.10.02.09 - Cryomodule in Tunnel	-	-	-	-	-	410	410	316	-	1.00	94	1.30	410	316	94	
<b>Complete</b>	<b>P.10.02.09.03 / ORNL - Procure/Fab - Cryomodule in Tunnel</b>	-	-	-	-	-	284	284	284	-	1.00	(0)	1.00	284	284	(0)	
<b>Complete</b>	<b>P.10.02.09.04 / ORNL - Installation</b>	-	-	-	-	-	126	126	32	-	1.00	94	3.93	126	32	94	
	P.10.02.10 - Plasma Process MB Cryomodule In Tunnel	-	-	4	-	(4)	309	309	287	-	1.00	23	1.08	309	287	23	
<b>Complete</b>	<b>P.10.02.10.03 / ORNL - Procure/Fab - Plasma Process MB Cryomodule In Tunnel</b>	-	-	4	-	(4)	309	309	287	-	1.00	23	1.08	309	287	23	
	P.10.02.11 - Linac Beamline Vacuum Controls	-	-	-	-	-	56	56	56	-	1.00	1	1.01	56	56	1	
<b>Complete</b>	<b>P.10.02.11.03 / ORNL - Procure/Fab - Linac Beamline Vacuum Controls</b>	-	-	-	-	-	56	56	56	-	1.00	1	1.01	56	56	1	
	P.10.02.12 - Linac Insulating Vacuum System Controls	-	-	-	-	-	124	124	113	-	1.00	11	1.10	124	113	11	
<b>Complete</b>	<b>P.10.02.12.03 / ORNL - Procure/Fab - Linac Insulating Vacuum System Controls</b>	-	-	-	-	-	124	124	113	-	1.00	11	1.10	124	113	11	
	P.10.02.13 - Cryomodule Controls	-	-	-	-	-	20	20	20	-	1.00	0	1.00	20	20	0	
<b>Complete</b>	<b>P.10.02.13.03 / ORNL - Procure/Fab - Cryomodule Controls</b>	-	-	-	-	-	20	20	20	-	1.00	0	1.00	20	20	0	
	<b>P.10.03 - RF Systems</b>	<b>312</b>	<b>169</b>	<b>224</b>	<b>(143)</b>	<b>(55)</b>	<b>15,175</b>	<b>13,827</b>	<b>13,372</b>	<b>(1,347)</b>	<b>0.91</b>	455	<b>1.03</b>	<b>21,748</b>	<b>21,293</b>	<b>454</b>	
	P.10.03.02 - SCL HPRF	283	162	208	(121)	(46)	11,000	9,732	9,660	(1,268)	0.88	72	1.01	15,790	15,719	72	
	P.10.03.02.02.03 / ORNL - Procure/Fab - Transmitters (SCL)	-	-	-	-	-	6,514	6,514	6,548	-	1.00	(35)	0.99	10,310	10,344	(35)	
	P.10.03.02.03.03 / ORNL - Procure/Fab - Klystrons (SCL)	2	162	207	159	(45)	2,818	1,965	1,959	(853)	0.70	6	1.00	3,654	3,648	6	
<b>Complete</b>	<b>P.10.03.02.04.03 / ORNL - Procure/Fab - Waveguide and Waveguide Components (SCL)</b>	-	-	-	-	-	895	895	875	-	1.00	20	1.02	895	875	20	
	P.10.03.02.05.03 / ORNL - Procure/Fab - Circulators (SCL)	280	-	0	(280)	(0)	531	116	74	(415)	0.22	42	1.57	689	647	42	
<b>Complete</b>	<b>P.10.03.02.06.03 / ORNL - Procure/Fab - Water Loads (SCL)</b>	-	-	0	-	(0)	242	242	203	-	1.00	38	1.19	242	203	38	
	P.10.03.06 - New Linac Modulators	17	7	16	(10)	(9)	2,857	2,820	2,650	(36)	0.99	170	1.06	4,611	4,441	170	
<b>Complete</b>	<b>P.10.03.06.02.03 / ORNL - Procure/Fab - Transformer (New Linac Modulators)</b>	-	-	-	-	-	352	352	326	-	1.00	26	1.08	352	326	26	
<b>Complete</b>	<b>P.10.03.06.03.03 / ORNL - Procure/Fab - SCR System</b>	-	-	-	-	-	207	207	185	-	1.00	22	1.12	207	185	22	
	P.10.03.06.04.03 / ORNL - Procure/Fab - Modulator System	17	7	16	(10)	(9)	2,298	2,262	2,139	(36)	0.98	123	1.06	4,053	3,930	123	
	P.10.03.07 - Utilities	-	-	0	-	(0)	862	862	733	-	1.00	129	1.18	862	733	129	
<b>Complete</b>	<b>P.10.03.07.02.03 / ORNL - Procure/Fab - Water Utilities, New Cold Linac SCL RF Cooling System (KL-06)</b>	-	-	-	-	-	150	150	148	-	1.00	2	1.01	150	148	2	
<b>Complete</b>	<b>P.10.03.07.07.03 / ORNL - Procure/Fab - Electrical</b>	-	-	0	-	(0)	627	627	522	-	1.00	105	1.20	627	522	105	
<b>Complete</b>	<b>P.10.03.07.07.04 / ORNL - Installation - Electrical - (NEP37740)</b>	-	-	-	-	-	85	85	63	-	1.00	22	1.35	85	63	22	
	P.10.03.08 - RF Controls	12	-	-	(12)	-	77	34	51	(43)	0.44	(17)	0.66	104	122	(18)	
	P.10.03.08.02.03 / ORNL - Procure/Fab - Linac RF Controls	12	-	-	(12)	-	77	34	51	(43)	0.44	(17)	0.66	104	122	(18)	
	P.10.03.09 - RF/SCL Global Controls	-	-	-	-	-	380	380	279	-	1.00	101	1.36	380	279	101	
<b>Complete</b>	<b>P.10.03.09.02.03 / ORNL - Procure/Fab - Linac/SCL Timing/MPS</b>	-	-	-	-	-	289	289	204	-	1.00	84	1.41	289	204	84	



May 2021 (\$k)		CURRENT PERIOD					CUMULATIVE TO DATE							AT COMPLETE		
		BCWS	BCWP	ACWP	VARIANCE		BCWS	BCWP	ACWP	VARIANCE				BAC	EAC	VAC
					SV	CV				SV	SPI	CV	CPI			
Status	ITEM															
Complete	P.10.03.09.03.03 / ORNL - Procure/Fab - Linac/SCL Protection System	-	-	-	-	-	91	91	74	-	1.00	17	1.23	91	74	17
	<b>P.10.06 - Conventional Facilities</b>	<b>49</b>	<b>317</b>	<b>87</b>	<b>269</b>	<b>231</b>	<b>8,095</b>	<b>7,986</b>	<b>8,201</b>	<b>(109)</b>	<b>0.99</b>	<b>(215)</b>	<b>0.97</b>	<b>8,189</b>	<b>8,518</b>	<b>(329)</b>
	P.10.06.02 - Building Modifications	49	317	87	269	231	8,095	7,986	8,201	(109)	0.99	(215)	0.97	8,189	8,518	(329)
	P.10.06.02.01.03.01 / ORNL - Procure/Fab - Klystron Gallery Building Modifications (Non-LOE)	-	269	45	269	224	7,218	7,110	7,163	(109)	0.98	(54)	0.99	7,218	7,386	(168)
	P.10.06.02.01.03.02 / ORNL - Procure/Fab - Klystron Gallery Building Modifications (LOE)	49	49	42	-	7	808	808	976	-	1.00	(168)	0.83	902	1,070	(168)
Complete	P.10.06.02.03.03 / ORNL - Procure/Fab - Facility HVAC and Water Controls	-	-	-	-	-	69	69	61	-	1.00	7	1.12	69	61	7
	<b>TOTAL</b>	<b>2,994</b>	<b>3,128</b>	<b>3,965</b>	<b>135</b>	<b>(837)</b>	<b>120,165</b>	<b>115,488</b>	<b>115,190</b>	<b>(4,677)</b>	<b>0.96</b>	<b>297</b>	<b>1.00</b>	<b>216,701</b>	<b>218,229</b>	<b>(1,529)</b>
Cumulative Thresholds:										Management Reserve			5,105	5,105		
* Red: CPI/SPI <0.85 or >+1.20 AND >\$100k (or > 1/2 BAC)										Contingency			49,762	48,233		
* Yellow: CPI/SPI between 0.85-0.90 or 1.15-1.20 AND >\$100k (or > 1/2 BAC)										TPC			271,567	271,567		