

BNL_WBS_Hierarchical	Activity ID	Activity Name	At Completion	Activity % Complete	Start	Finish	Total Float	Budgeted Labor Units	Budgeted Nonlabor Units	Budgeted Total Cost	2021			2022		2023
											FY21		FY22	FY23		
POM02.1.03.01.03.01	S172800	Prepare fiber assemblies for final blocks	529	86%	21-Jun-19 A	02-Aug-21	15	9360	0	163,757						
POM02.2.04.01.03	S330640	Prototype System Development Labor	294	80%	16-Mar-20 A	14-May-21	1	360	0	44,440						
POM02.2.04.01.03	S330642	Prototype System Development M&S	294	80%	16-Mar-20 A	14-May-21	1	0	35000	40,518						
POM02.2.04.01.04	S331710	Design Cooling Manifolds for EMCAL	302	40%	18-Mar-20 A	28-May-21	17	32	0	3,917						
POM02.1.02.05.02	S137500	v2 Assemble and test TPC FEE preproduction prototype	284	98%	13-Apr-20 A	28-May-21	9	712	0	92,435						
POM02.1.02.05.02	S137700	Final Design Review, Production Readiness Review - TPC FEE	290	95%	13-Apr-20 A	08-Jun-21	9	8	0	1,277						
POM02.1.02.05.03	S140605	Test v2 Prototype TPC FEE Board with 80nsec Full SAMPA Chip	206	85%	03-Aug-20 A	28-May-21	4	380	0	56,737						
POM02.1.03.01.03.01	S171800	Procure EMCAL Epoxy for Final Blocks - Delivery Acceptance	240	48%	03-Aug-20 A	19-Jul-21	15	0	90653	104,858						
POM02.1.03.01.03.01	S172500	Order parts and fabricate molds for EMCAL Sectors 13-64 Blocks - Delivery Acc	240	75%	03-Aug-20 A	19-Jul-21	15	0	26230	30,340						
POM02.1.03.02.03.03	S195400	Procure EMCAL Mechanical Parts for Final Sectors - Delivery Acceptance	165	85%	14-Sep-20 A	12-May-21	0	0	251357	291,746						
POM02.2.04.01.03	S330700	Create Layout/Schematic Drawings & Design, Specification Control Documents	151	30%	23-Oct-20 A	02-Jun-21	1	144	0	18,052						
POM02.1.02.05.04	S141800	Procure TPC FEE Production Components, Phase 2 (All except Optical and S,	164	85%	02-Nov-20 A	29-Jun-21	19	0	266694	309,548						
POM02.1.03.02.02.03	S187500	Receive, unpack, log & inspect final blocks	295	32%	23-Nov-20 A	31-Jan-22	0	1384	0	179,682						
POM02.1.03.02.02.03	S187800	Install reflectors on final blocks Labor	295	25%	23-Nov-20 A	31-Jan-22	0	1384	0	179,723						
POM02.1.03.02.02.03	S187900	Install reflectors on final blocks M&S	295	25%	23-Nov-20 A	31-Jan-22	0	0	0	0						
POM02.1.03.01.03.01	S172870	EMCAL Block Production QA	208	50%	01-Dec-20 A	27-Sep-21	4	0	460000	533,915						
POM02.2.04.01.04	S331730	Design Coolin Manifolds for INTT	120	50%	08-Dec-20 A	01-Jun-21	17	32	0	4,035						
POM02.2.04.01.04	S331770	Conceptual Design for Cooling Tube Routing from Detector to EMCAL manifold	145	20%	08-Dec-20 A	06-Jul-21	17	32	0	4,035						
POM02.2.04.01.04	S331780	Conceptual Design for Cooling Tube Routing from Detector to TPC manifold	150	50%	08-Dec-20 A	13-Jul-21	17	32	0	4,035						
POM02.2.04.01.04	S331790	Conceptual Design for Cooling Tube Routing from Detector to INTT, MVTX ma	155	5%	14-Dec-20 A	26-Jul-21	17	64	0	8,069						
POM02.2.02.03.01.04.02.01	S1006240	AET submits PDR report to BNL for approval of IP8 Cold Box Assembly	122	12%	11-Jan-21 A	02-Jul-21	1	0	0	0						
POM02.1.03.02.03.03	S196300	Build mechanical fixtures for final sectors	82	40%	12-Jan-21 A	07-May-21	3	720	0	84,633						
POM02.1.03.02.03.03	S196200	Build mechanical enclosures for final sectors	85	20%	12-Jan-21 A	12-May-21	0	720	0	84,633						
POM02.1.03.02.03.03	S196400	Build cooling system for final sectors	97	20%	12-Jan-21 A	28-May-21	16	180	0	27,303						
POM02.1.03.02.03.03	S196100	Procure EMCAL Cooling System for Final Sectors - Delivery Acceptance	93	33%	18-Jan-21 A	28-May-21	16	0	70893	82,284						
POM02.1.03.02.02.03	S187600	Install light guides on final blocks Labor	257	23%	21-Jan-21 A	31-Jan-22	0	1384	0	180,018						
POM02.1.03.02.02.03	S187700	Install light guides on final blocks M&S	257	23%	21-Jan-21 A	31-Jan-22	0	0	1650	1,926						
POM02.1.03.02.02.03	S188000	Install SiPMs daughterboards on final blocks Labor	259	23%	22-Jan-21 A	03-Feb-22	0	1384	0	180,039						
POM02.1.03.02.02.03	S188200	Glue final blocks together into modules	259	17%	22-Jan-21 A	03-Feb-22	0	1384	0	180,039						
POM02.1.03.02.02.03	S188100	Install SiPMs daughterboards on final blocks M&S	259	23%	22-Jan-21 A	03-Feb-22	0	0	300	350						
POM02.1.03.02.03.03	S196500	Install modules in final sectors	257	17%	26-Jan-21 A	03-Feb-22	0	1845	0	234,726						
POM02.1.02.05.04	S143250	TPC Front End Electronics Protection Components	96	33.2%	15-Feb-21 A	30-Jun-21	14	0	150000	174,103						
POM02.1.05.02.02	S232600	Procure EMCAL External LV/Bias Signal/Comm/Test Cables Sectors 13-64 - Pr	70	70%	22-Feb-21 A	28-May-21	5	80	0	11,723						
POM02.2.04.01.04	S331800	Create Layout/Schematic Drawings & Design, Specification Control Documents	119	33%	22-Feb-21 A	09-Aug-21	17	192	0	25,846						
POM02.1.03.02.03.03	S196700	Install readout electronics on final sectors	240	17%	22-Feb-21 A	04-Feb-22	0	1845	0	235,148						
POM02.1.03.02.03.03	S196800	Install cables & cooling system on final sectors	240	17%	22-Feb-21 A	04-Feb-22	0	3573	0	500,103						
POM02.2.04.01.04	S331750	Conceptual Design for Routing Detector Cooling Chiller Systems to Det Manifo	84	50%	23-Feb-21 A	21-Jun-21	17	32	0	4,035						
POM02.1.03.02.03.03	S196900	Test final sectors with LEDs & cosmic rays	239	4%	23-Feb-21 A	04-Feb-22	0	5532	0	125,693						
POM02.1.05.02.02	S229300	Fabricate EMCAL Production Preamp Boards Sectors 13-64 - Delivery Accepta	66	50%	26-Feb-21 A	28-May-21	0	0	473550	549,642						
POM02.1.05.02.02	S229400	Test EMCAL Preamp Boards: Production Sectors 13-64	76	30%	26-Feb-21 A	14-Jun-21	0	384	0	6,313						
POM02.2.02.01.01	S278800	LESHC-PSSC Review Cryogenic Safety Review	292	50%	08-Mar-21 A	04-May-22	0	40	0	7,447						
POM02.1.02.05.04	S141500	Procure TPC FEE Production Components, Phase 1 (Optical Transceiver Com)	91	33.2%	15-Mar-21 A	21-Jul-21	4	0	29663	34,429						
POM02.1.03.02.03.03	S197000	Repair or rework any sectors as required	224	19.71%	16-Mar-21 A	04-Feb-22	0	3921	0	252,651						
POM02.1.05.02.02	S229405	Test EMCAL Preamp Boards: Production Sectors 13-64 - Contributed Labor	55	30%	29-Mar-21 A	14-Jun-21	0	249	0	31,221						
POM02.2.04.01.06	S333900	Analyze Gas Mixing House & Gas Pad Components Requirements - CA-D Res	141	50%	01-Apr-21 A	20-Oct-21	19	16	0	2,458						
POM02.2.04.01.06	S1003039	Analyze Gas Mixing House & Gas Pad Components Requirements - Physics R	141	50%	01-Apr-21 A	20-Oct-21	19	132	0	17,793						
POM02.2.04.01.06	S334000	Create Gas Mixing House & Gas Pad Components Schematic Design and Spe	171	50%	01-Apr-21 A	06-Dec-21	19	8	0	1,250						
POM02.2.04.01.06	S1003079	Create Gas Mixing House & Gas Pad Components Schematic Design and Spe	171	50%	01-Apr-21 A	06-Dec-21	19	132	0	16,825						
POM02.1.05.02.02	S232800	Procure EMCAL External LV/Bias Signal/Comm/Test Cables Sectors 13-64 - Ve	73	50%	14-Apr-21 A	27-Jul-21	5	0	0	0						
POM02.2.03.02	S317100	Prepare Procurement Package(s) for Inner HCal Support Tabs - Physics Resou	32	50%	15-Apr-21 A	28-May-21	10	48	0	5,642						
POM02.2.03.02	S317110	Prepare Procurement Package(s) for Inner HCal Support Tabs - CA-D Resourc	32	50%	15-Apr-21 A	28-May-21	10	120	0	18,202						
POM02.2.03.02	S317980	Procure Large Support Rings - M&S	93	5%	15-Apr-21 A	25-Aug-21	9	0	300000	348,205						
POM02.1.05.02.02	S232700	Procure EMCAL External LV/Bias Signal/Comm/Test Cables Sectors 13-64 - Pr	56	50%	23-Apr-21 A	13-Jul-21	5	0	0	0						

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														FY22		FY23
POM02.1.03.01.03.02	S175200	Fabricate final blocks sector 35	6	15%	30-Apr-21 A	07-May-21	15	135	0	5,163						
POM02.2.04.01.03	S330800	Review Detector Electronics Racks and Rack generic support systems Design/	33	50%	30-Apr-21 A	16-Jun-21	1	8	0	1,213						
POM02.2.04.01.03	S1002799	Review Detector Electronics Racks and Rack generic support systems Design/	33	50%	30-Apr-21 A	16-Jun-21	1	48	0	6,017						
POM02.1.02.05.04	S143100	Procure TPC FEE Production Boards & Assembly - Contract/PO - Leadtime	105	10%	30-Apr-21 A	28-Sep-21	4	0	0	0						
POM02.1.06.01.03	S255700	Procure DAQ Production Boards - Contract Award(s)	0	0%	03-May-21		15	0	0	0						
POM02.2.05.03	S348600	Ready to Assemble Cradle Carriage in AH	0	0%		03-May-21	7	0	0	0						
POM02.1.06.03.02	S266701	Final Design Review - DAQ Global Level-1	1	0%	03-May-21	03-May-21	0	24	0	3,121						
POM02.1.06.03.02	S266702	Procurement Readiness Review - DAQ Global Level-1	1	0%	03-May-21	03-May-21	0	24	0	3,121						
POM02.2.03.02	OBLG3177	Procure Large Support Rings - Obligation	1	0%	03-May-21	03-May-21	9	0	348205	348,205						
POM02.2.05.03	S348700	Assemble base, carriage alignment and carriage roller supports - Labor - Physic	10	0%	03-May-21	14-May-21	7	512	0	60,730						
POM02.2.05.03	S348800	Assemble base, carriage alignment and carriage roller supports - M&S	10	0%	03-May-21	14-May-21	7	0	2500	2,902						
POM02.2.05.03	S348710	Assemble base, carriage alignment and carriage roller supports - Labor - CA-D	10	0%	03-May-21	14-May-21	7	352	0	46,728						
POM02.2.03.05	S326700	CC Bridge, Mid Platforms & Access - Vendor Selection - Physics Resource(s)	30	0%	03-May-21	14-Jun-21	14	84	0	9,874						
POM02.2.03.05	S326710	CC Bridge, Mid Platforms & Access - Vendor Selection - CA-D Resource(s)	30	0%	03-May-21	14-Jun-21	14	92	0	12,282						
POM02.1.06.01.03	S255800	Procure DAQ Production Boards - Contract/PO - Leadtime	80	0%	03-May-21	24-Aug-21	15	0	0	0						
POM02.1.07	S273700	Oversight of sPHENIX MBD Digitizers Procurement	140	0%	03-May-21	19-Nov-21	10	16	0	2,857						
POM02.1.06.03.02	S266800	GL1 Prototype: Update design specifications; incorporate final design choice	20	0%	04-May-21	01-Jun-21	0	204	0	21,770						
POM02.1.03.01.03.02	S175300	Fabricate final blocks sector 36	6	0%	10-May-21	17-May-21	15	135	0	5,163						
POM02.2.05.03	S348900	Assemble HCal cradle onto base - Labor - Physics Resource(s)	15	0%	17-May-21	07-Jun-21	7	112	0	13,711						
POM02.2.05.03	S348910	Assemble HCal cradle onto base - Labor - CA-D Resource(s)	15	0%	17-May-21	07-Jun-21	7	104	0	14,312						
POM02.2.05.03	S348915	Assemble HCal cradle onto base - M&S	15	0%	17-May-21	07-Jun-21	7	0	3000	3,482						
POM02.1.03.01.03.02	S175400	Fabricate final blocks sector 37	6	0%	18-May-21	25-May-21	15	135	0	5,163						
POM02.1.03.01.03.02	S175500	Fabricate final blocks sector 38	6	0%	26-May-21	03-Jun-21	15	135	0	5,163						
POM02.1.02.05.03	S140700	Review Results of SAMPA 80 nsec Full Chip Performance with v2 Prototype TI	10	0%	01-Jun-21	14-Jun-21	4	265	0	45,869						
POM02.2.03.02	S317200	Evaluate & Process Bid for Inner HCal Support Tabs - Physics Resource(s)	20	0%	01-Jun-21	28-Jun-21	10	32	0	3,761						
POM02.2.03.02	S317210	Evaluate & Process Bid for IHCal Structural Support - CA-D Resource(s)	20	0%	01-Jun-21	28-Jun-21	10	32	0	4,854						
POM02.1.06.03.03	S266900	GL1 Production: final firmware updates	90	0%	02-Jun-21	07-Oct-21	0	534	0	64,249						
POM02.1.03.01.03.02	S175600	Fabricate final blocks sector 39	6	0%	04-Jun-21	11-Jun-21	15	135	0	5,163						
POM02.2.05.03	S348920	Completed - Assemble HCal cradle onto base	0	0%		07-Jun-21	7	0	0	0						
POM02.2.05.04	S350600	Transport Assembled Outer HCal Sectors to AH (Partial Shipment) - Labor - C/	1	0%	08-Jun-21	08-Jun-21	7	8	0	826						
POM02.2.05.04	S350700	Transport Assembled Outer HCal Sectors to AH (Partial Shipment) - M&S	1	0%	08-Jun-21	08-Jun-21	7	0	500	580						
POM02.2.05.04	S1002439	Transport Assembled Outer HCal Sectors to AH (Partial Shipment) - Labor - Pt	1	0%	08-Jun-21	08-Jun-21	7	400	0	50,178						
POM02.2.05.04	S350800	Install Partial Outer HCal (Prior to SC Magnet Install) - Labor - CA-D Resource	58	0%	09-Jun-21	30-Aug-21	7	628	0	83,986						
POM02.2.05.04	S350900	Install Partial Outer HCal (Prior to SC Magnet Install) - M&S	58	0%	09-Jun-21	30-Aug-21	7	0	500	580						
POM02.2.05.04	S1002519	Install Partial Outer HCal (Prior to SC Magnet Install) - Labor - Physics Resour	58	0%	09-Jun-21	30-Aug-21	7	1224	0	152,827						
POM02.1.03.01.03.02	S175700	Fabricate final blocks sector 40	6	0%	14-Jun-21	21-Jun-21	15	135	0	5,163						
POM02.2.03.05	S326800	CC Bridge, Mid Platforms & Access - Contract Award(s)	0	0%	15-Jun-21		15	0	0	0						
POM02.1.02.05.03	S140701	Production Readiness Review for TPC FEE full production	1	0%	15-Jun-21	15-Jun-21	4	24	0	3,674						
POM02.2.03.05	OBLG3268	CC Bridge, Mid Platforms & Access - Obligation	1	0%	15-Jun-21	15-Jun-21	14	0	379627	379,627						
POM02.1.02.05.04	S141300	Procure TPC FEE Production Components, Phase 1 (Optical Transceiver Com)	0	0%	16-Jun-21		4	0	0	0						
POM02.1.02.05.04	OBLG1413	Procure TPC FEE Production Components, Phase 1 (Optical Transceiver Com)	1	0%	16-Jun-21	16-Jun-21	4	0	34429	34,429						
POM02.1.02.05.04	OBLG1416	Procure TPC FEE Production Components, Phase 2 (All except Optical and S)	1	0%	16-Jun-21	16-Jun-21	19	0	309548	309,548						
POM02.1.02.05.04	S141400	Procure TPC FEE Production Components, Phase 1 (Optical Transceiver Com)	20	0%	16-Jun-21	14-Jul-21	4	0	0	0						
POM02.2.03.05	S326900	CC Bridge, Mid Platforms & Access - BNL Oversight - Physics Resource(s)	90	0%	16-Jun-21	22-Oct-21	14	108	0	12,729						
POM02.2.03.05	S327000	CC Bridge, Mid Platforms & Access - Vendor Leadtime	90	0%	16-Jun-21	22-Oct-21	14	0	0	0						
POM02.2.03.05	S326910	CC Bridge, Mid Platforms & Access - BNL Oversight - CA-D Resource(s)	90	0%	16-Jun-21	22-Oct-21	14	126	0	18,637						
POM02.2.04.01.03	S330900	Address Action Items from Detector Electronics Racks and Rack generi	10	0%	17-Jun-21	30-Jun-21	1	48	0	6,017						
POM02.2.04.01.04	S331760	Conceptual Design for Cooling Tube Routing from Detector to IHCal manifold	5	0%	22-Jun-21	28-Jun-21	17	32	0	4,035						
POM02.1.03.01.03.02	S175800	Fabricate final blocks sector 41	6	0%	22-Jun-21	29-Jun-21	15	135	0	5,163						
POM02.2.03.02	S317400	Procure IHCal Support Tabs - Provide Requirements to Procurement	5	0%	29-Jun-21	06-Jul-21	10	32	0	4,170						
POM02.1.03.01.03.02	S175900	Fabricate final blocks sector 42	6	0%	30-Jun-21	08-Jul-21	15	135	0	5,163						
POM02.2.04.01.03	S331000	Design/Safety Reviews Complete, Detector Electronics Racks and Rack generi	0	0%		30-Jun-21	1	0	0	0						
POM02.2.04.01.03	S331100	Prepare Detector Electronics Racks and Rack generic support systems Compor	60	0%	01-Jul-21	24-Sep-21	1	104	0	12,975						

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														FY22	FY23	
POM02.2.02.03.01.04.02.01	S1006280	BNL review for PDR approval	10	0%	06-Jul-21	19-Jul-21	1	0	31313	34,933						
POM02.2.03.02	S317500	Procure IHCal Support Tabs - Prepare and Send Solicitation	5	0%	07-Jul-21	13-Jul-21	10	0	0	0						
POM02.1.03.01.03.02	S176000	Fabricate final blocks sector 43	6	0%	09-Jul-21	16-Jul-21	15	135	0	5,163						
POM02.2.03.02	S317600	Procure IHCal Support Tabs - Vendor Response and Selection	5	0%	14-Jul-21	20-Jul-21	10	32	0	4,170						
POM02.1.03.01.03.02	S176100	Fabricate final blocks sector 44	6	0%	19-Jul-21	26-Jul-21	15	135	0	5,163						
POM02.2.02.03.01.04.02.01	S1006360	AET submits IDR to BNL for approval	10	0%	20-Jul-21	02-Aug-21	1	0	0	0						
POM02.2.03.02	S317700	Procure IHCal Structural Support - Contract Award	0	0%	21-Jul-21		11	0	0	0						
POM02.2.03.02	OBLG3177	Procure Internal Detector Structural Support - Obligation	1	0%	21-Jul-21	21-Jul-21	10	0	311667	311,667						
POM02.1.02.05.04	OBLG1430	Procure TPC FEE Production Boards & Assembly - Obligation	1	0%	22-Jul-21	22-Jul-21	4	0	175244	175,244						
POM02.2.03.02	S317800	Procure IHCal Support Tabs - Leadtime	58	0%	22-Jul-21	13-Oct-21	10	0	0	0						
POM02.1.03.01.03.02	S176200	Fabricate final blocks sector 45	6	0%	27-Jul-21	03-Aug-21	15	135	0	5,163						
POM02.1.05.02.02	S232900	Procure EMCal External LV/Bias Signal/Comm/Test Cables Sectors 13-64 - Ve	20	0%	28-Jul-21	24-Aug-21	5	0	0	0						
POM02.2.02.03.01.04.02.01	S1006400	BNL review for IDR approval	5	0%	03-Aug-21	09-Aug-21	1	0	31313	34,933						
POM02.1.03.01.03.02	S176300	Fabricate final blocks sector 46	6	0%	04-Aug-21	11-Aug-21	15	135	0	5,163						
POM02.2.04.01.04	S331900	Review Detector Gas and Cooling Services Systems Design/Safety - CA-D Res	10	0%	10-Aug-21	23-Aug-21	17	16	0	2,427						
POM02.2.04.01.04	S1002879	Review Detector Gas and Cooling Services Systems Design/Safety - Physics R	10	0%	10-Aug-21	23-Aug-21	17	44	0	5,718						
POM02.2.02.03.01.04.02.01	S1006440	AET submits FDR report to BNL for approval	20	0%	10-Aug-21	07-Sep-21	1	0	125253	139,734						
POM02.1.03.01.03.02	S176400	Fabricate final blocks sector 47	6	0%	12-Aug-21	19-Aug-21	15	135	0	5,163						
POM02.1.03.01.03.02	S176500	Fabricate final blocks sector 48	6	0%	20-Aug-21	27-Aug-21	15	135	0	5,163						
POM02.2.04.01.04	S332000	Address Action Items from Detector Gas and Cooling Services Systems Desigr	10	0%	24-Aug-21	07-Sep-21	17	52	0	6,795						
POM02.1.05.02.02	S233000	Procure EMCal External LV/Bias Signal/Comm/Test Cables Sectors 13-64 - Cc	0	0%	25-Aug-21		5	0	0	0						
POM02.1.05.02.02	OBLG2330	Procure EMCal External LV/Bias Cables Sectors 13-64 - Obligation	1	0%	25-Aug-21	25-Aug-21	5	0	205854	205,854						
POM02.1.06.01.03	S255900	Procure DAQ Production Boards - Delivery Acceptance	5	0%	25-Aug-21	31-Aug-21	15	0	104682	121,503						
POM02.1.05.02.02	S233100	Procure EMCal External LV/Bias Signal/Comm/Test Cables Sectors 13-64 - Cc	100	0%	25-Aug-21	21-Jan-22	5	0	0	0						
POM02.1.05.02.02	S233250	Trunk Signal Cables - EMCal	100	0%	25-Aug-21	21-Jan-22	10	0	670160	789,356						
POM02.1.05.02.02	S244450	Trunk Signal Cables - OuterHCal	100	0%	25-Aug-21	21-Jan-22	10	0	128640	151,520						
POM02.2.03.02	S318180	Perform Large Support Rings Acceptance	10	0%	26-Aug-21	09-Sep-21	9	120	0	14,616						
POM02.1.03.01.03.02	S176600	Fabricate final blocks sector 49	6	0%	30-Aug-21	07-Sep-21	15	135	0	5,163						
POM02.2.05.04	S350910	Completed - Install Partial Outer HCal (Prior to SC Magnet Install)	0	0%		30-Aug-21	7	0	0	0						
POM02.2.05.03	S349100	Install magnet mounting feet - Labor - CA-D Resource(s)	10	0%	31-Aug-21	14-Sep-21	7	4	0	607						
POM02.2.05.03	S349200	Install magnet mounting feet - M&S	10	0%	31-Aug-21	14-Sep-21	7	0	3000	3,482						
POM02.2.05.03	S1002239	Install magnet mounting feet - Labor - Physics Resource(s)	10	0%	31-Aug-21	14-Sep-21	7	178	0	21,265						
POM02.1.06.01.03	S256000	DAQ Production Boards: Firmware updates	80	0%	01-Sep-21	29-Dec-21	15	1264	0	139,610						
POM02.2.01.01	S274320	RHIC FY22 Run	81	0%	01-Sep-21*	30-Dec-21	0	0	0	0						
POM02.2.04.01.04	S332100	Design/Safety Reviews Complete, Detector Gas and Cooling Services Systems	0	0%		07-Sep-21	17	0	0	0						
POM02.2.02.03.01.04.02.01	S1006480	AET begins material procurement	5	0%	08-Sep-21	14-Sep-21	1	0	0	0						
POM02.1.03.01.03.02	S176700	Fabricate final blocks sector 50	6	0%	08-Sep-21	15-Sep-21	15	135	0	5,163						
POM02.2.04.01.04	S332200	Prepare Detector Gas and Cooling Services Systems Components Procuremer	50	0%	08-Sep-21	18-Nov-21	17	104	0	13,381						
POM02.2.03.02	S318182	Assemble Large Support Rings	15	0%	10-Sep-21	30-Sep-21	9	160	0	20,683						
POM02.2.05.05	S353100	Transport SC Magnet from 912 to AH - Labor - Physics Resource(s)	2	0%	15-Sep-21	16-Sep-21	7	52	0	6,659						
POM02.2.05.05	S353200	Transport SC Magnet from 912 to AH - M&S	2	0%	15-Sep-21	16-Sep-21	7	0	1500	1,741						
POM02.2.05.05	S353110	Transport SC Magnet from 912 to AH - Labor - CA-D Resource(s)	2	0%	15-Sep-21	16-Sep-21	7	96	0	13,099						
POM02.2.02.03.01.04.02.01	S1006520	Fabricate the IP8 Cold Box Assembly	60	0%	15-Sep-21	13-Dec-21	1	0	0	0						
POM02.1.03.01.03.02	S176800	Fabricate final blocks sector 51	6	0%	16-Sep-21	23-Sep-21	15	135	0	5,318						
POM02.2.05.05	S353300	Install SC Magnet on Cradle - Labor - Physics Resource(s)	2	0%	17-Sep-21	20-Sep-21	7	50	0	6,423						
POM02.2.05.05	S353400	Install SC Magnet on Cradle - M&S	2	0%	17-Sep-21	20-Sep-21	7	0	1500	1,741						
POM02.2.05.05	S353310	Install SC Magnet on Cradle - Labor - CA-D Resource(s)	2	0%	17-Sep-21	20-Sep-21	7	96	0	13,099						
POM02.2.05.05	S353410	Completed - Install SC Magnet on Cradle	0	0%		20-Sep-21	7	0	0	0						
POM02.2.05.05	S353500	Align/Survey SC Magnet to Cradle - Labor - Physics Resource(s)	10	0%	21-Sep-21	04-Oct-21	7	80	0	9,460						
POM02.2.05.05	S353600	Align/Survey SC Magnet to Cradle - M&S	10	0%	21-Sep-21	04-Oct-21	7	0	3500	4,079						
POM02.2.05.05	S353510	Align/Survey SC Magnet to Cradle - Labor - CA-D Resource(s)	10	0%	21-Sep-21	04-Oct-21	7	400	0	49,116						
POM02.1.03.01.03.02	S176900	Fabricate final blocks sector 52	6	0%	24-Sep-21	01-Oct-21	15	135	0	5,318						
POM02.2.04.01.03	S331200	Evaluate & Process Detector Electronics Racks and Rack generic support syste	60	0%	27-Sep-21	23-Dec-21	1	240	0	30,995						

BNL_WBS_Hierarchical	Activity ID	Activity Name	At Completion	Activity % Complete	Start	Finish	Total Float	Budgeted Labor Units	Budgeted Nonlabor Units	Budgeted Total Cost	2021			2022		2023
											FY22		FY23			
POM02.1.02.05.04	S143200	Procure TPC FEE Production Boards & Assembly - Delivery Acceptance	5	0%	29-Sep-21	05-Oct-21	4	0	150983	175,244						
POM02.1.03.01.03.02	S177000	Fabricate final blocks sector 53	6	0%	04-Oct-21	12-Oct-21	15	135	0	5,318						
POM02.2.05.05	S350950	Install Large Support Rings and Cross Braces	5	0%	05-Oct-21	12-Oct-21	7	80	0	11,092						
POM02.1.02.05.04	S143300	Perform QA Testing on TPC FEE	69	0%	06-Oct-21	19-Jan-22	4	883	0	87,358						
POM02.1.06.03.03	S267900	GL1 Production: install GL1 system	25	0%	08-Oct-21	15-Nov-21	0	560	0	48,500						
POM02.1.03.01.03.02	S177100	Fabricate final blocks sector 54	6	0%	13-Oct-21	20-Oct-21	15	135	0	5,318						
POM02.2.05.04	S351000	Transport Remainder of Outer Hcal Sectors to AH - Labor - CA-D Resource(s)	10	0%	13-Oct-21	26-Oct-21	7	8	0	851						
POM02.2.05.04	S351100	Transport Remainder of Outer Hcal Sectors to AH - M&S	10	0%	13-Oct-21	26-Oct-21	7	0	500	592						
POM02.2.05.04	S1002599	Transport Remainder of Outer Hcal Sectors to AH - Labor - Physics Resource(s)	10	0%	13-Oct-21	26-Oct-21	7	400	0	51,684						
POM02.2.03.02	S317900	Procure IHCal Support Tabs - Delivery Acceptance	5	0%	14-Oct-21	20-Oct-21	10	0	45850	53,430						
POM02.1.02.01.08	S121700	Install TPC Electronics	10	0%	14-Oct-21	27-Oct-21	4	608	0	18,807						
POM02.2.05.04	S351200	Install Remainder of Outer HCal Sectors - Labor - CA-D Resource(s)	20	0%	20-Oct-21	17-Nov-21	7	508	0	69,879						
POM02.2.05.04	S351300	Install Remainder of Outer HCal Sectors - M&S	20	0%	20-Oct-21	17-Nov-21	7	0	500	592						
POM02.2.05.04	S1002679	Install Remainder of Outer HCal Sectors - Labor - Physics Resource(s)	20	0%	20-Oct-21	17-Nov-21	7	1120	0	143,427						
POM02.2.03.02	S317910	Completed - Procure IHCal Structural Support - Delivery Acceptance	0	0%		20-Oct-21	10	0	0	0						
POM02.1.03.01.03.02	S177200	Fabricate final blocks sector 55	6	0%	21-Oct-21	28-Oct-21	15	135	0	5,318						
POM02.2.03.02	S318000	Perform Inner HCal Support Tabs Acceptance - Physics Resource(s)	25	0%	21-Oct-21	29-Nov-21	10	28	0	3,390						
POM02.2.03.02	S318010	Perform Inner HCal Support Tabs Acceptance - CA-D Resource(s)	25	0%	21-Oct-21	29-Nov-21	10	16	0	2,500						
POM02.2.03.05	S327100	CC Bridge, Mid Platforms & Access - Delivery Acceptance	5	0%	25-Oct-21	29-Oct-21	19	0	320659	379,628						
POM02.2.03.05	S327200	CC Bridge, Mid Platforms & Access - Delivery Acceptance Support Labor - Phy	10	0%	25-Oct-21	05-Nov-21	14	12	0	1,453						
POM02.2.03.05	S327210	CC Bridge, Mid Platforms & Access - Delivery Acceptance Support Labor - CA-	10	0%	25-Oct-21	05-Nov-21	14	44	0	6,932						
POM02.1.02.01.08	S121800	Test TPC Prior to Installation	62	0%	28-Oct-21	31-Jan-22	4	3432	0	0						
POM02.1.03.01.03.02	S177300	Fabricate final blocks sector 56	5	0%	29-Oct-21	04-Nov-21	15	135	0	5,318						
POM02.2.03.05	S327110	Completed - CC Bridge, Mid Platforms & Access - Delivery Acceptance	0	0%		29-Oct-21	19	0	0	0						
POM02.1.03.01.03.02	S177400	Fabricate final blocks sector 57	5	0%	05-Nov-21	12-Nov-21	15	135	0	5,318						
POM02.2.03.05	S327300	CC Bridge, Mid Platforms & Access - Ready for Installation	0	0%		05-Nov-21	14	0	0	0						
POM02.1.03.01.03.02	S177500	Fabricate final blocks sector 58	5	0%	15-Nov-21	19-Nov-21	15	135	0	5,318						
POM02.1.04.01	S199330	Manufacture Inner HCal Support Structure - Delivery Acceptance 4	5	0%	15-Nov-21*	19-Nov-21	6	0	237500	264,958						
POM02.1.07	S273500	Procure Min/Bias Electronics (sPHENIX Production Digitizers) - Delivery Accept	5	0%	15-Nov-21	19-Nov-21	10	0	14770	17,486						
POM02.1.07	S273600	Procure MBD Shaper/Disc Board 128 Channels - Delivery Acceptance	5	0%	15-Nov-21	19-Nov-21	10	0	46420	54,957						
POM02.1.06.03.03	S268000	GL1 Production: commission GL1 system	30	0%	16-Nov-21	30-Dec-21	0	288	0	27,641						
POM02.1.06.03.03	S268010	GL1 Production: commission GL1 system Instr	30	0%	16-Nov-21	30-Dec-21	0	108	0	14,495						
POM02.2.05.04	S351310	Completed - Install Remainder of Outer HCal Sectors	0	0%		17-Nov-21	7	0	0	0						
POM02.2.05.04	S351400	Align/Survey Outer Hcal to Centerline - Labor - Physics Resource(s)	5	0%	18-Nov-21	24-Nov-21	11	24	0	2,906						
POM02.2.05.04	S351500	Align/Survey Outer Hcal to Centerline - M&S	5	0%	18-Nov-21	24-Nov-21	11	0	500	592						
POM02.2.05.04	S351410	Align/Survey Outer Hcal to Centerline - Labor - CA-D Resource(s)	5	0%	18-Nov-21	24-Nov-21	11	140	0	17,879						
POM02.2.05.03	S349300	Install platforms & access - Labor - Physics Resource(s)	20	0%	18-Nov-21	17-Dec-21	7	272	0	33,494						
POM02.2.05.03	S349400	Install platforms & access - M&S	20	0%	18-Nov-21	17-Dec-21	7	0	1000	1,184						
POM02.2.05.03	S349310	Install platforms & access - Labor - CA-D Resource(s)	20	0%	18-Nov-21	17-Dec-21	7	328	0	47,298						
POM02.2.04.01.04	S332300	Evaluate & Process Detector Gas and Cooling Services Systems Components	30	0%	19-Nov-21	05-Jan-22	17	48	0	6,655						
POM02.1.04.01	S200100	Inner HCal Support Structure Ready for Installation	0	0%		19-Nov-21	6	0	0	0						
POM02.2.05.06	S355100	Inner HCal Sectors Ready for Installation	0	0%		19-Nov-21	6	0	0	0						
POM02.2.05.06	S355400	Install Inner Hcal Assembly Insertion Fixture - Labor	4	0%	22-Nov-21	29-Nov-21	6	88	0	10,795						
POM02.2.05.06	S355500	Install Inner Hcal Assembly Insertion Fixture - M&S	4	0%	22-Nov-21	29-Nov-21	6	0	500	592						
POM02.1.03.01.03.02	S177600	Fabricate final blocks sector 59	5	0%	22-Nov-21	30-Nov-21	15	135	0	5,318						
POM02.1.07	S273800	Test Full Min/Bias Electronics	35	0%	22-Nov-21	13-Jan-22	10	112	0	10,912						
POM02.2.03.02	S318100	Inner HCal Support Tabs Components Ready for Installation	0	0%		29-Nov-21	10	0	0	0						
POM02.2.05.06	S355600	Install Inner HCal assembly on Insertion Fixture - Labor	4	0%	30-Nov-21	03-Dec-21	6	640	0	79,737						
POM02.2.05.06	S355700	Install Inner HCal assembly on Insertion Fixture - M&S	4	0%	30-Nov-21	03-Dec-21	6	0	500	592						
POM02.1.03.01.03.02	S177700	Fabricate final blocks sector 60	5	0%	01-Dec-21	07-Dec-21	15	135	0	5,318						
POM02.2.05.06	S355800	Install 1st Inner HCal Support Ring - Labor	2	0%	06-Dec-21	07-Dec-21	6	42	0	5,366						
POM02.2.05.06	S355900	Install 1st Inner HCal Support Ring - M&S	2	0%	06-Dec-21	07-Dec-21	6	0	500	592						
POM02.2.04.01.06	S334100	Review Gas Mixing House & Gas Pad Components Design/Safety - CA-D Resc	10	0%	07-Dec-21	20-Dec-21	19	8	0	1,250						

BNL_WBS_Hierarchical	Activity ID	Activity Name	At Completion	Activity % Complete	Start	Finish	Total Float	Budgeted Labor Units	Budgeted Nonlabor Units	Budgeted Total Cost	2021			2022		2023
														FY22	FY23	
POM02.2.04.01.06	S1003119	Review Gas Mixing House & Gas Pad Components Design/Safety - Physics Re	10	0%	07-Dec-21	20-Dec-21	19	16	0	2,218						
POM02.2.05.06	S356000	Install Inner HCal - Labor - CA-D Resource(s)	2	0%	08-Dec-21	09-Dec-21	6	124	0	17,251						
POM02.2.05.06	S356100	Install Inner HCal - M&S	2	0%	08-Dec-21	09-Dec-21	6	0	500	592						
POM02.2.05.06	S1003799	Install Inner HCal - Labor - Physics Resource(s)	2	0%	08-Dec-21	09-Dec-21	6	42	0	5,366						
POM02.1.03.01.03.02	S177800	Fabricate final blocks sector 61	5	0%	08-Dec-21	14-Dec-21	15	135	0	5,318						
POM02.2.05.06	S356200	Install 2nd Inner HCal Support Ring - Labor	2	0%	10-Dec-21	13-Dec-21	6	42	0	5,366						
POM02.2.05.06	S356300	Install 2nd Inner HCal Support Ring - M&S	2	0%	10-Dec-21	13-Dec-21	6	0	500	592						
POM02.2.05.06	S356310	Completed - Install 2nd Inner HCal Support Ring	0	0%		13-Dec-21	6	0	0	0						◆ Completed - Install 2nd Inner HCal Support Ring
POM02.2.02.03.01.04.02.01	S1006560	Witness test IP8 Cold Box Assembly	5	0%	14-Dec-21	20-Dec-21	1	0	0	0						
POM02.2.05.06	S356400	Align/Survey Inner HCal to SC Magnet Centerline - Labor - Physics Resource(s)	5	0%	14-Dec-21	20-Dec-21	6	24	0	2,906						
POM02.2.05.06	S356500	Align/Survey Inner HCal to SC Magnet Centerline - M&S	5	0%	14-Dec-21	20-Dec-21	6	0	500	592						
POM02.2.05.06	S356410	Align/Survey Inner HCal to SC Magnet Centerline - Labor - CA-D Resource(s)	5	0%	14-Dec-21	20-Dec-21	6	200	0	26,192						
POM02.1.03.01.03.02	S177900	Fabricate final blocks sector 62	5	0%	15-Dec-21	21-Dec-21	15	135	0	5,318						
POM02.2.05.03	S349410	Completed - Install platforms & access	0	0%		17-Dec-21	7	0	0	0						◆ Completed - Install platforms & access
POM02.2.02.03.01.04.02.01	S1006600	Delivery of the IP8 Cold Box Assembly and Document Package	5	0%	21-Dec-21	28-Dec-21	1	0	0	0						
POM02.2.04.01.06	S334200	Address Action Items from Gas Mixing House & Gas Pad Components Design	10	0%	21-Dec-21	05-Jan-22	19	16	0	2,218						
POM02.1.03.01.03.02	S178000	Fabricate final blocks sector 63	5	0%	22-Dec-21	29-Dec-21	15	135	0	5,318						
POM02.2.04.01.03	S331300	Procure & Deliver Detector Elec. Racks & Rack generic support systems Comp	50	0%	27-Dec-21	09-Mar-22	1	240	0	31,376						
POM02.2.04.01.03	S331400	Procure & Deliver Detector Elec. Racks & Rack generic support systems Comp	50	0%	27-Dec-21	09-Mar-22	1	0	92000	108,919						
POM02.2.02.03.01.06	S287400	(Helium System: 1008B Coldbox/Transfer lines / IR8 Coldbox) Installation/Rigg	30	0%	29-Dec-21	10-Feb-22	1	64	0	8,910						
POM02.1.03.01.03.02	S178100	Fabricate final blocks sector 64	5	0%	30-Dec-21	06-Jan-22	15	135	0	5,318						
POM02.1.06.01.03	S260700	DAQ Production: Internal Readiness Review	10	0%	30-Dec-21	13-Jan-22	15	320	0	56,320						
POM02.2.05.07	S358200	Transport Assembled EMCAL Sectors to AH - Labor - CA-D Resource(s)	25	0%	30-Dec-21	04-Feb-22	0	8	0	1,250						
POM02.2.05.07	S358300	Transport Assembled EMCAL Sectors to AH - M&S	25	0%	30-Dec-21	04-Feb-22	0	0	500	592						
POM02.2.05.07	S1003839	Transport Assembled EMCAL Sectors to AH - Labor - Physics Resource(s)	25	0%	30-Dec-21	04-Feb-22	0	184	0	23,671						
POM02.2.05.07	S358400	Install EMCAL Sectors - Labor	16	0%	03-Jan-22	25-Jan-22	0	640	0	79,737						
POM02.2.05.07	S358500	Install EMCAL Sectors - M&S	16	0%	03-Jan-22	25-Jan-22	0	0	500	592						
POM02.1.06.03.03	S268100	GL1 Production: additional firmware improvements	24	0%	03-Jan-22	04-Feb-22	0	156	0	20,937						
POM02.2.04.01.06	S334300	Design/Safety Reviews Complete, Gas Mixing House & Gas Pad Components	0	0%		05-Jan-22	19	0	0	0						◆ Design/Safety Reviews Complete, Gas Mixing House & Gas Pad
POM02.2.04.01.04	OBLG32900	Procure & Deliver Detector Gas and Cooling Services Systems Components (le	1	0%	06-Jan-22	06-Jan-22	17	0	124193	124,193						
POM02.2.04.01.06	S334400	Prepare Gas Mixing House & Gas Pad Components Procurement Package(s) -	30	0%	06-Jan-22	17-Feb-22	19	2	0	312						
POM02.2.04.01.06	S1003159	Prepare Gas Mixing House & Gas Pad Components Procurement Package(s) -	30	0%	06-Jan-22	17-Feb-22	19	96	0	12,467						
POM02.2.04.01.04	S332400	Procure & Deliver Detector Gas and Cooling Services Systems Components (le	97	0%	06-Jan-22	24-May-22	17	192	0	26,621						
POM02.2.04.01.04	S332500	Procure & Deliver Detector Gas and Cooling Services Systems Components (le	97	0%	06-Jan-22	24-May-22	17	0	53000	62,747						
POM02.1.03.01.03.02	S178200	EMCAL Block fabrication is complete	0	0%		06-Jan-22	16	0	0	0						◆ EMCAL Block fabrication is complete
POM02.1.03.01.03.03	S178900	Pack and ship final blocks for sectors 57-64 to BNL - Purchased Services	1	0%	07-Jan-22	07-Jan-22	15	41	0	2,638						
POM02.1.03.01.03.03	S176010	Pack and ship final blocks for sectors 57-64 to BNL - M&S	1	0%	07-Jan-22	07-Jan-22	15	0	6480	7,672						
POM02.1.03.01.03.03	S179000	EMCAL final blocks arrive at BNL	0	0%		07-Jan-22	15	0	0	0						◆ EMCAL final blocks arrive at BNL
POM02.1.07	S273900	MBD Production Complete	0	0%		13-Jan-22	10	0	0	0						◆ MBD Production Complete
POM02.1.06.01.03	S260800	DAQ Production: DAQ Ready for Operation	0	0%		13-Jan-22	15	0	0	0						◆ DAQ Production: DAQ Ready for Operation
POM02.1.07	S274000	Bench Test Min/Bias Detector	5	0%	14-Jan-22	21-Jan-22	10	160	0	14,607						
POM02.1.02.05.04	S143400	TPC FEE Production Complete	0	0%		19-Jan-22	12	0	0	0						◆ TPC FEE Production Complete
POM02.1.07	S274100	MinBias Detector Ready to Install	0	0%		21-Jan-22	10	0	0	0						◆ MinBias Detector Ready to Install
POM02.1.05.02.02	S233200	Procure EMCAL External LV/Bias Signal/Comm/Test Cables Sectors 13-64 - De	5	0%	24-Jan-22	28-Jan-22	5	0	177356	209,971						
POM02.2.05.07	S358510	Completed - Install EMCAL Sectors	0	0%		25-Jan-22	0	0	0	0						◆ Completed - Install EMCAL Sectors
POM02.2.05.07	S358600	Align/Survey EMCAL to SC Magnet Centerline - Labor - Physics Resource(s)	7	0%	26-Jan-22	03-Feb-22	0	20	0	2,421						
POM02.2.05.07	S358700	Align/Survey EMCAL to SC Magnet Centerline - M&S	7	0%	26-Jan-22	03-Feb-22	0	0	500	592						
POM02.2.05.07	S358610	Align/Survey EMCAL to SC Magnet Centerline - Labor - CA-D Resource(s)	7	0%	26-Jan-22	03-Feb-22	0	200	0	26,192						
POM02.1.05.03.02	S253100	Calorimeter Electronics Complete	0	0%		28-Jan-22	5	0	0	0						◆ Calorimeter Electronics Complete
POM02.1.05.02.02	S234300	EMCAL Electronics Complete	0	0%		28-Jan-22	5	0	0	0						◆ EMCAL Electronics Complete
POM02.1.02.01.08	S121900	TPC Ready to Install (Assembly Complete)	0	0%		31-Jan-22	4	0	0	0						◆ TPC Ready to Install (Assembly Complete)
POM02.1.03.02.03.03	S196600	EMCAL Modules Complete	0	0%		03-Feb-22	0	0	0	0						◆ EMCAL Modules Complete
POM02.2.05.07	S358800	Install EMCAL Cables and Services - Labor	21	0%	04-Feb-22	07-Mar-22	0	608	0	78,454						

BNL_WBS_Hierarchical	Activity ID	Activity Name	At Completion	Activity % Complete	Start	Finish	Total Float	Budgeted Labor Units	Budgeted Nonlabor Units	Budgeted Total Cost	2021	2022	2023
												FY22	FY23
POM02.2.05.07	S358900	Install EMCal Cables and Services - M&S	21	0%	04-Feb-22	07-Mar-22	0	0	500	592			
POM02.1.03.02.03.03	S197300	EMCal Ready to Install	0	0%		04-Feb-22	0	0	0	0			
POM02.1.03.02.03.03	S197100	EMCal Sectors Complete	0	0%		04-Feb-22	0	0	0	0			
POM02.1.06.03.03	S268200	GL1 Ready to Operate	0	0%		04-Feb-22	0	0	0	0			
POM02.2.05.07	S358100	EMCal Sectors Ready for Installation	0	0%		04-Feb-22	0	0	0	0			
POM02.2.02.03.01.06	S287410	Completed - (Helium System: 1008B Coldbox/Transferlines / IR8 Coldbox) Inst	0	0%		10-Feb-22	1	0	0	0			
POM02.2.02.03.04.03	S299900	(Cryo Controls Hardware) Cable termination	20	0%	11-Feb-22	11-Mar-22	1	160	0	19,372			
POM02.2.04.01.06	S334500	Evaluate & Process Gas Mixing House & Gas Pad Components Bids - CA-D R	30	0%	18-Feb-22	01-Apr-22	19	2	0	312			
POM02.2.04.01.06	S1003199	Evaluate & Process Gas Mixing House & Gas Pad Components Bids - Physics	30	0%	18-Feb-22	01-Apr-22	19	96	0	12,467			
POM02.2.02.03.04.03	S300400	(Cryo Controls Hardware) Heater I/O wiring, temp sensors	5	0%	03-Mar-22	09-Mar-22	18	16	0	1,937			
POM02.2.05.03	S349500	Install Pole Tips - Labor - Physics Resource(s)	10	0%	08-Mar-22	21-Mar-22	0	80	0	9,967			
POM02.2.05.03	S349600	Install Pole Tips - M&S	10	0%	08-Mar-22	21-Mar-22	0	0	3000	3,552			
POM02.2.05.03	S349510	Install Pole Tips - Labor - CA-D Resource(s)	10	0%	08-Mar-22	21-Mar-22	0	336	0	48,254			
POM02.2.04.01.03	S331500	Perform Detector Electronics Racks and Rack generic support systems Compor	10	0%	10-Mar-22	23-Mar-22	1	72	0	9,104			
POM02.2.02.03.04.03	S300500	(Cryo Controls Hardware) Wire up instruments and control valves	15	0%	14-Mar-22	01-Apr-22	1	96	0	11,623			
POM02.2.05.10	EXT101400	[External Activity] MVTX Complete and ready for installation	0	0%		17-Mar-22*	0	0	0	0			
POM02.2.05.03	S349610	Completed - Install Pole Tips	0	0%		21-Mar-22	0	0	0	0			
POM02.2.05.12	S370000	Move Full sPHENIX to IR - Labor - CA-D Resource(s)	5	0%	22-Mar-22	28-Mar-22	0	56	0	7,642			
POM02.2.04.01.03	S331600	Detector Electronics Racks and Rack generic support systems Components Re:	0	0%		23-Mar-22	1	0	0	0			
POM02.2.05.02	S347100	Install Electronics Racks Rackroom - Labor	60	0%	24-Mar-22	16-Jun-22	1	848	0	111,108			
POM02.2.02.03.01.06	S287500	RHIC Helium Interface - Final Bayonet jumpers lines install, pressure & leak ch	10	0%	29-Mar-22	11-Apr-22	5	280	0	41,645			
POM02.2.02.03.03.04	S294880	(Warm Piping System) IR Hall work Jumper work between Platform and West '	15	0%	29-Mar-22	18-Apr-22	0	128	0	15,966			
POM02.2.02.03.04.03	S300000	(Cryo Controls Hardware) Check out continuity	10	0%	04-Apr-22	15-Apr-22	1	40	0	4,843			
POM02.2.04.01.06	S334600	Procure & Deliver Gas Mixing House & Gas Pad Components (leadtime and fa	50	0%	04-Apr-22	13-Jun-22	19	288	0	37,400			
POM02.2.04.01.06	S334700	Procure & Deliver Gas Mixing House & Gas Pad Components (leadtime and fa	50	0%	04-Apr-22	13-Jun-22	19	0	10000	11,839			
POM02.2.02.03.03.04	S295000	(Warm Piping System) Pressure and leak check	5	0%	12-Apr-22	18-Apr-22	0	64	0	8,169			
POM02.2.02.03.01.06	S287600	RHIC Helium Interface - Final pump and purge	10	0%	12-Apr-22	25-Apr-22	5	148	0	18,569			
POM02.2.02.03.04.03	S300600	(Cryo Controls Hardware) Hardware Installed	0	0%		15-Apr-22	1	0	0	0			
POM02.2.02.03.05	S301100	(Cryo Controls Hardware) Live I/O check out and control logic test	10	0%	18-Apr-22	29-Apr-22	1	264	0	34,384			
POM02.2.02.03.03.04	S294910	Completed - (Warm Piping System) Phase 2: Welding of piping, vent lines & ir	0	0%		18-Apr-22	0	0	0	0			
POM02.2.02.03.03.04	S295200	(Warm Piping System) Final pressure. leak check and equipment shakedown	5	0%	19-Apr-22	25-Apr-22	0	64	0	8,169			
POM02.2.02.03.01.06	S287700	RHIC Helium Interface - Installation complete	0	0%		25-Apr-22	5	0	0	0			
POM02.2.02.01.01	S278900	LESHC Review Magnet Overall System Safety Review	1	0%	02-May-22	02-May-22	1	40	0	7,447			
POM02.2.02.01.01	S279000	ASSRC REVIEW and Full Walkthrough	1	0%	03-May-22	03-May-22	1	32	0	6,197			
POM02.2.02.01.02	S279100	Cooldown	15	0%	05-May-22	25-May-22	0	180	0	27,602			
POM02.2.05.12	S370500	Prepare for Review of Safety System Design by CAD ESRC	20	0%	09-May-22	06-Jun-22	9	160	0	28,540			
POM02.2.05.09	EXT327600	[External Activity] INTT Assembly Complete and Ready for Installation	0	0%		25-May-22*	0	0	0	0			
POM02.2.04.01.04	S332600	Perform Detector Gas and Cooling Services Systems Components Acceptance	20	0%	25-May-22	22-Jun-22	17	40	0	5,405			
POM02.2.02.01.02	S279200	4.5K Static Heat Load test	2	0%	26-May-22	27-May-22	0	24	0	3,680			
POM02.2.02.05.03	S308900	Magnet Field Measurements: Install Field Mapping Equipment	10	0%	26-May-22	09-Jun-22	2	480	0	74,746			
POM02.2.02.01.02	S279300	4.5K Low power test	5	0%	31-May-22	06-Jun-22	0	260	0	43,357			
POM02.2.05.12	S370510	Review of Safety System Design by CAD ESRC	3	0%	07-Jun-22	09-Jun-22	9	64	0	12,125			
POM02.2.02.01.02	S279400	4.5K High Power Test	5	0%	07-Jun-22	13-Jun-22	0	260	0	43,357			
POM02.2.05.12	S370520	Prepare Procedures (Blue Sheet, Pink Sheet)	20	0%	10-Jun-22	08-Jul-22	9	240	0	41,494			
POM02.2.02.01.02	S279500	Magnet is operational	0	0%		13-Jun-22	0	0	0	0			
POM02.2.04.01.06	S334800	Perform Gas Mixing House & Gas Pad Components Acceptance - CA-D Resou	10	0%	14-Jun-22	27-Jun-22	19	2	0	312			
POM02.2.04.01.06	S1003239	Perform Gas Mixing House & Gas Pad Components Acceptance - Physics Res	10	0%	14-Jun-22	27-Jun-22	19	32	0	4,156			
POM02.2.02.05.03	S309000	Magnet Field Measurements: Map Magnetic Field of SC Magnet	15	0%	14-Jun-22	05-Jul-22	0	480	0	74,746			
POM02.2.02.05.03	S309005	Magnet Field Measurements: Map Magnetic Field of SC Magnet	15	0%	14-Jun-22	05-Jul-22	0	480	0	74,746			
POM02.2.05.02	S347200	Install Electronics Racks On Carriage - Labor	60	0%	17-Jun-22	12-Sep-22	1	848	0	111,108			
POM02.2.05.02	S347310	Install Electronics Racks On Carriage - M&S	60	0%	17-Jun-22	12-Sep-22	1	0	500	592			
POM02.2.04.01.04	S332700	Detector Gas and Cooling Services Systems Components Ready for Installation	0	0%		22-Jun-22	17	0	0	0			
POM02.2.05.02	S347400	Install Gas and Cooling System Services - Labor	40	0%	23-Jun-22	18-Aug-22	17	936	0	117,543			

BNL_WBS_Hierarchical	Activity ID	Activity Name	At Completion	Activity % Complete	Start	Finish	Total Float	Budgeted Labor Units	Budgeted Nonlabor Units	Budgeted Total Cost	2021			2022		2023
														FY22	FY23	
POM02.2.05.02	S347500	Install Gas and Cooling System Services - M&S	40	0%	23-Jun-22	18-Aug-22	17	0	500	592						
POM02.2.04.01.06	S334900	Gas Mixing House & Gas Pad Components Ready for Installation	0	0%		27-Jun-22	19	0	0	0						◆ Gas Mixing House & Gas Pad Compone
POM02.2.05.02	S346700	Install Non-IR Infrastructure - Labor - Physics Resource(s)	35	0%	28-Jun-22	16-Aug-22	19	520	0	68,583						
POM02.2.05.02	S346800	Install Non-IR Infrastructure - M&S	35	0%	28-Jun-22	16-Aug-22	19	0	500	592						
POM02.2.05.02	S346710	Install Non-IR Infrastructure - Labor - CA-D Resource(s)	35	0%	28-Jun-22	16-Aug-22	19	348	0	43,978						
POM02.2.05.08	S360400	Transport Assembled TPC Sections to AH - Labor - Physics Resource(s)	5	0%	30-Jun-22	07-Jul-22	0	40	0	5,124						
POM02.2.05.08	S360500	Transport Assembled TPC Sections to AH - M&S	5	0%	30-Jun-22	07-Jul-22	0	0	500	592						
POM02.2.05.08	S360410	Transport Assembled TPC Sections to AH - Labor - CA-D Resource(s)	5	0%	30-Jun-22	07-Jul-22	0	8	0	1,250						
POM02.2.02.05.03	S309010	Completed - Magnet Field Measurements: Map Magnetic Field of SC Magnet	0	0%		05-Jul-22	0	0	0	0						◆ Completed - Magnet Field Measureme
POM02.2.02.05.03	S309100	Magnet Field Measurements: Remove Field Mapping Equipment	2	0%	06-Jul-22	07-Jul-22	0	120	0	14,529						
POM02.2.05.08	S360600	Open SC Magnet Pole Tip Doors	1	0%	08-Jul-22	08-Jul-22	0	20	0	2,562						
POM02.2.05.12	S370530	Review and approve procedures	2	0%	11-Jul-22	12-Jul-22	9	96	0	17,579						
POM02.2.05.08	S360700	Install TPC Support - Labor	5	0%	11-Jul-22	15-Jul-22	0	100	0	12,248						
POM02.2.05.08	S360800	Install TPC Support - M&S	5	0%	11-Jul-22	15-Jul-22	0	0	500	592						
POM02.2.05.12	S370540	Magnet Checkout After Power Testing	5	0%	13-Jul-22	19-Jul-22	9	48	0	9,084						
POM02.2.05.08	S360900	Install TPC (Mechanical) - Labor - CA-D Resource(s)	5	0%	18-Jul-22	22-Jul-22	0	8	0	851						
POM02.2.05.08	S361000	Install TPC (Mechanical) - M&S	5	0%	18-Jul-22	22-Jul-22	0	0	500	592						
POM02.2.05.08	S1003879	Install TPC (Mechanical) - Labor - Physics Resource(s)	5	0%	18-Jul-22	22-Jul-22	0	116	0	14,603						
POM02.2.05.12	S370550	Preparation for Full Operation - In-Rack Safety System Check	5	0%	20-Jul-22	26-Jul-22	9	72	0	11,898						
POM02.2.05.08	S361010	Completed - Install TPC	0	0%		22-Jul-22	0	0	0	0						◆ Completed - Install TPC
POM02.2.05.08	S361100	Align/Survey TPC to SC Magnet Centerline - Labor - Physics Resource(s)	5	0%	25-Jul-22	29-Jul-22	0	20	0	2,421						
POM02.2.05.08	S361200	Align/Survey TPC to SC Magnet Centerline - M&S	5	0%	25-Jul-22	29-Jul-22	0	0	500	592						
POM02.2.05.08	S361110	Align/Survey TPC to SC Magnet Centerline - Labor - CA-D Resource(s)	5	0%	25-Jul-22	29-Jul-22	0	200	0	26,192						
POM02.2.05.12	S370560	Preparation for Full Operation - Magnet Re-check Cryo/PSU/QD/ODH Check	10	0%	27-Jul-22	09-Aug-22	9	48	0	9,084						
POM02.2.05.02	S346300	Install Beampipe/Vacuum/Bakeout - Labor - Physics Resource(s)	7	0%	01-Aug-22	09-Aug-22	0	76	0	9,905						
POM02.2.05.02	S346400	Install Beampipe/Vacuum/Bakeout - M&S	7	0%	01-Aug-22	09-Aug-22	0	0	500	592						
POM02.2.05.02	S346310	Install Beampipe/Vacuum/Bakeout - Labor - CA-D Resource(s)	7	0%	01-Aug-22	09-Aug-22	0	224	0	27,347						
POM02.2.05.02	S346410	Completed - Install Beampipe	0	0%		09-Aug-22	0	0	0	0						◆ Completed - Install Beampipe
POM02.2.05.11	S368500	Transport Assembled Min Bias Sections to AH - Labor	1	0%	10-Aug-22	10-Aug-22	0	16	0	2,218						
POM02.2.05.11	S368600	Transport Assembled Min Bias Sections to AH - M&S	1	0%	10-Aug-22	10-Aug-22	0	0	500	592						
POM02.2.05.09	S362800	Transport Assembled INTT Sections to AH - Labor	2	0%	10-Aug-22	11-Aug-22	1	40	0	5,124						
POM02.2.05.09	S362900	Transport Assembled INTT Sections to AH - M&S	2	0%	10-Aug-22	11-Aug-22	1	0	500	592						
POM02.2.05.12	S370570	Preparation for Full Operation - Verify Global Safety System	5	0%	10-Aug-22	16-Aug-22	9	80	0	12,369						
POM02.2.05.08	S361300	Install TPC Cables and Services - Labor	15	0%	10-Aug-22	30-Aug-22	4	468	0	60,293						
POM02.2.05.08	S361400	Install TPC Cables and Services - M&S	15	0%	10-Aug-22	30-Aug-22	4	0	500	592						
POM02.2.05.11	S368700	Install Min Bias Support - Labor	8	0%	11-Aug-22	22-Aug-22	0	32	0	4,156						
POM02.2.05.11	S368800	Install Min Bias Support - M&S	8	0%	11-Aug-22	22-Aug-22	0	0	500	592						
POM02.2.05.09	S363000	Install INTT Support - Labor	2	0%	12-Aug-22	15-Aug-22	1	76	0	9,483						
POM02.2.05.09	S363100	Install INTT Support - M&S	2	0%	12-Aug-22	15-Aug-22	1	0	500	592						
POM02.2.05.10	S365500	Install MVTX Support - Labor	3	0%	12-Aug-22	16-Aug-22	1	76	0	9,483						
POM02.2.05.10	S365600	Install MVTX Support - M&S	3	0%	12-Aug-22	16-Aug-22	1	0	500	592						
POM02.2.05.09	S363200	Install INTT (mechanical) - Labor	3	0%	16-Aug-22	18-Aug-22	7	76	0	9,483						
POM02.2.05.09	S363300	Install INTT (mechanical) - M&S	3	0%	16-Aug-22	18-Aug-22	7	0	500	592						
POM02.2.05.10	S365700	Install FELIX	2	0%	17-Aug-22	18-Aug-22	1	16	0	2,147						
POM02.2.05.10	S365900	Install Optical fibers	2	0%	17-Aug-22	18-Aug-22	1	40	0	4,843						
POM02.2.05.10	S366000	Install RU	2	0%	17-Aug-22	18-Aug-22	1	40	0	5,369						
POM02.2.05.10	S366200	Install Samtec Cables	2	0%	17-Aug-22	18-Aug-22	1	40	0	4,843						
POM02.2.05.10	S365800	Install FELIX	2	0%	17-Aug-22	18-Aug-22	1	16	0	0						
POM02.2.05.10	S366100	Install RU	2	0%	17-Aug-22	18-Aug-22	1	40	0	0						
POM02.2.05.12	S370580	Preparation for Full Operation - Final Safety Walk Trough	5	0%	17-Aug-22	23-Aug-22	9	128	0	20,889						
POM02.2.05.09	S363400	Align/Survey INTT to SC Magnet Centerline - Labor - Physics Resource(s)	5	0%	19-Aug-22	25-Aug-22	7	20	0	2,421						
POM02.2.05.09	S363500	Align/Survey INTT to SC Magnet Centerline - M&S	5	0%	19-Aug-22	25-Aug-22	7	0	500	592						
POM02.2.05.09	S363410	Align/Survey INTT to SC Magnet Centerline - Labor - CA-D Resource(s)	5	0%	19-Aug-22	25-Aug-22	7	140	0	17,879						

BNL_WBS_Hierarchical	Activity ID	Activity Name	At Completion	Activity % Complete	Start	Finish	Total Float	Budgeted Labor Units	Budgeted Nonlabor Units	Budgeted Total Cost	2021		2022		2023
													FY22	FY23	
POM02.2.05.10	S366300	Install Half-Barrel 1	6	0%	19-Aug-22	26-Aug-22	1	160	0	20,423					
POM02.2.05.10	S366400	Install Half-Barrel 1	6	0%	19-Aug-22	26-Aug-22	1	60	0	0					
POM02.2.05.11	S368900	Install Min Bias (mechanical) - Labor	5	0%	23-Aug-22	29-Aug-22	0	32	0	4,156					
POM02.2.05.11	S369000	Install Min Bias (mechanical) - M&S	5	0%	23-Aug-22	29-Aug-22	0	0	500	592					
POM02.2.05.12	S370590	Preparation for Full Operation - Approvals - CAD and Physics	5	0%	24-Aug-22	30-Aug-22	9	16	0	3,495					
POM02.2.05.09	S363600	Install INTT Cables and Services - Labor	5	0%	26-Aug-22	01-Sep-22	7	552	0	71,307					
POM02.2.05.09	S363700	Install INTT Cables and Services - M&S	5	0%	26-Aug-22	01-Sep-22	7	0	500	592					
POM02.2.05.10	S366500	Install Half-Barrel 2	5	0%	29-Aug-22	02-Sep-22	1	160	0	20,423					
POM02.2.05.10	S366600	Install Half-Barrel 2	5	0%	29-Aug-22	02-Sep-22	1	60	0	0					
POM02.2.05.11	S369010	Completed - Install Min Bias	0	0%		29-Aug-22	0	0	0	0					◆ Completed - Install Min Bias
POM02.2.05.11	S369100	Align/Survey Min Bias to SC Magnet Centerline - Labor - Physics Resource(s)	5	0%	30-Aug-22	06-Sep-22	0	8	0	969					
POM02.2.05.11	S369200	Align/Survey Min Bias to SC Magnet Centerline - M&S	5	0%	30-Aug-22	06-Sep-22	0	0	500	592					
POM02.2.05.11	S369110	Align/Survey Min Bias to SC Magnet Centerline - Labor - CA-D Resource(s)	5	0%	30-Aug-22	06-Sep-22	0	68	0	8,885					
POM02.2.05.08	S361500	TPC - Operational Readiness Review (ORR)	5	0%	31-Aug-22	07-Sep-22	4	32	0	4,261					
POM02.2.05.09	S363800	INTT - Operational Readiness Review (ORR)	5	0%	02-Sep-22	09-Sep-22	7	32	0	4,156					
POM02.2.05.10	S366700	Align/Survey MVTX to SC Magnet Centerline - Labor - Physics Resource(s)	2	0%	06-Sep-22	07-Sep-22	1	20	0	2,421					
POM02.2.05.10	S366800	Align/Survey MVTX to SC Magnet Centerline - M&S	2	0%	06-Sep-22	07-Sep-22	1	0	500	592					
POM02.2.05.10	S366710	Align/Survey MVTX to SC Magnet Centerline - Labor - CA-D Resource(s)	2	0%	06-Sep-22	07-Sep-22	1	140	0	17,879					
POM02.2.05.11	S369300	Install Min Bias Cables and Services - Labor	5	0%	07-Sep-22	13-Sep-22	0	552	0	71,307					
POM02.2.05.11	S369400	Install Min Bias Cables and Services - M&S	5	0%	07-Sep-22	13-Sep-22	0	0	500	592					
POM02.2.05.10	S366900	Install MVTX Remaining Cables and Services - Labor	3	0%	08-Sep-22	12-Sep-22	1	392	0	51,007					
POM02.2.05.10	S367000	Install MVTX Remaining Cables and Services - M&S	3	0%	08-Sep-22	12-Sep-22	6	0	500	592					
POM02.2.05.08	S361600	Address Action Items from TPC ORR	5	0%	08-Sep-22	14-Sep-22	4	32	0	4,261					
POM02.2.05.09	S363900	Address Action Items from INTT ORR	5	0%	12-Sep-22	16-Sep-22	7	32	0	4,156					
POM02.2.05.10	S367100	MVTX - Operational Readiness Review (ORR)	5	0%	13-Sep-22	19-Sep-22	6	32	0	4,156					
POM02.2.05.10	S367200	MVTX - Operational Readiness Review (ORR)	5	0%	13-Sep-22	19-Sep-22	6	32	0	0					
POM02.2.05.12	S370400	sPHENIX Installation Complete Ready for ORR	0	0%		13-Sep-22	0	0	0	0					◆ sPHENIX Installation Compl
POM02.2.05.11	S369500	Min Bias - Operational Readiness Review (ORR)	5	0%	14-Sep-22	20-Sep-22	5	32	0	4,156					
POM02.2.05.12	S370600	Full sPHENIX Detector - Operational Readiness Review (ORR)	5	0%	14-Sep-22	20-Sep-22	0	128	0	19,340					
POM02.2.05.08	S361700	Commission TPC - Labor Phys	15	0%	15-Sep-22	05-Oct-22	4	600	0	100,662					
POM02.2.05.08	S361900	Commission TPC - M&S	15	0%	15-Sep-22	05-Oct-22	4	0	500	594					
POM02.2.05.08	S361800	Commission TPC - Labor Students	15	0%	15-Sep-22	05-Oct-22	4	1600	0	0					
POM02.2.05.09	S364000	Commission INTT - Labor	10	0%	19-Sep-22	30-Sep-22	7	600	0	100,062					
POM02.2.05.09	S364200	Commission INTT - M&S	10	0%	19-Sep-22	30-Sep-22	7	0	500	592					
POM02.2.05.09	S364100	Commission INTT - Labor	10	0%	19-Sep-22	30-Sep-22	7	1600	0	0					
POM02.2.05.10	S367300	Address Action Items from MVTX ORR	5	0%	20-Sep-22	26-Sep-22	6	32	0	4,156					
POM02.2.05.10	S367400	Address Action Items from MVTX ORR	5	0%	20-Sep-22	26-Sep-22	6	32	0	0					
POM02.2.05.11	S369600	Address Action Items from Min Bias ORR	5	0%	21-Sep-22	27-Sep-22	5	32	0	4,156					
POM02.2.05.12	S370700	Address Action Items from Full sPHENIX Detector ORR	15	0%	21-Sep-22	12-Oct-22	0	128	0	19,611					
POM02.2.05.10	S367500	Commission MVTX - Labor	5	0%	27-Sep-22	03-Oct-22	6	1440	0	0					
POM02.2.05.10	S367600	Commission MVTX - M&S	5	0%	27-Sep-22	03-Oct-22	6	0	500	594					
POM02.2.05.11	S369700	Commission Min Bias - Labor	5	0%	28-Sep-22	04-Oct-22	5	600	0	101,263					
POM02.2.05.11	S369900	Commission Min Bias - M&S	5	0%	28-Sep-22	04-Oct-22	5	0	500	597					
POM02.2.05.11	S369800	Commission Min Bias - Labor	5	0%	28-Sep-22	04-Oct-22	5	1600	0	0					
POM02.2.05.09	S364210	Completed - Install INTT	0	0%		30-Sep-22	7	0	0	0					◆ Completed - Install INTT
POM02.2.05.10	S367610	Completed - Install MVTX	0	0%		03-Oct-22	6	0	0	0					◆ Completed - Install MVTX
POM02.2.05.12	S370800	sPHENIX Ready for Operations	0	0%		12-Oct-22	0	0	0	0					◆ sPHENIX Ready for Ope
POM02.2.05.12	S370850	WBS 2X Schedule Contingency	71	0%	13-Oct-22	27-Jan-23	0	0	0	0					
POM02.2.05.12	S370900	Start of RHIC Run 30-Jan-23	0	0%	30-Jan-23*		0	0	0	0					◆ Start of
POM02.2.05.12	S999999	Completed: sPHENIX MIE and Support Projects	0	0%		30-Jan-23	0	0	0	0					◆ Comple