

		Early Implementation Program			Homestake DUSEL Initial Suite of Experiments						
ReEntry					4850L and Above			Deep Homestake & Expanded 4850L			
CY 2006		2007	2008	2009	2010	2011	2012	2013	2014	2015	
Common Infrastructure											
Surface and Underground Laboratory Modules and Support Services Surface Support Facilities Phase I Surface Support Facilities Phase II 300L 4850L 7400L + 8000L Ultralow Background Materials Manufacture and Storage Well shielded "Water Room" for Assay and Experiments Low Background Counting	Title, Insurance, Indemnification, Rehab. Plans										
	Phase I Rehab Existing Buildings				Phase II Expansion						
	Rehab U/G	Prepare 300L									
	Rehab U/G	Rehab U/G	Prepare 4850L			Rehab Deep U/G	Prepare Deep Labs				
		300L Outfit / Production	300L Operation								
		300L Outfit / Production	300L Operation	4850L Outfit	4850L Operation						
Education and Outreach											
Surface											
	300L Outfit / Production	300L Operation			4850L Outfit	4850L Operation	7400L Outfit	Deep Modules Operation			
Physics											
Dark Matter											
	300L Outfit R&D	R&D and Lab outfit			4850L Deployment	Continued 4850L Operation Potential Deployment	Continued or Deep Labs				
<i>XENON</i>											
<i>ZEPLIN</i>	At Boulby	R&D and Lab outfit			R&D Potential	Potential Deployment	Potential Deep Deployment				
<i>miniCLEAN</i>	300L Outfit R&D	R&D and Lab outfit			4850L Deployment		Deep Homestake (plus solar neutrinos)				
<i>DRIFT</i>	At Boulby				R&D Potential		Potential Homestake Deployment				
<i>TPC</i>	300L Outfit	R&D			R&D then Expt @4850L		Continued or Deep Labs				
<i>SIGN</i>	300L Outfit	R&D			4850L Deployment		Continued or Deep Labs				
SuperCDMS						Potential Deployment	Deep Deployment				
Neutrinoless Double Beta Decay											
<i>Majorana</i>	300L Outfit and Storage	R&D and Lab outfit			4850L Deployment	Operate 1st Phase Majorana EXO 4850L	Outfit Deep Lab	MJ at Deep Homestake with add'l Mass			
<i>EXO</i>		R&D EXO200 @ WIPP					Continued or Deep Labs				
Long Baseline Neutrinos + PDK											
Large Cavity Geotechnical Studies, Siting	Cavity Geotechnical Studies, 300L	Design			Cavity Construction 100KT Module(s)		Long Baseline Neutrino Program				
Lar. HSD & Water Cerenkov Detector R&D	300L Outfitting	R&D Program			300L R&D	4850L R&D	300L R&D 4850L R&D				
Solar Neutrinos											
<i>LENS R&D</i>	300L Outfitting	R&D Program					Advanced R&D				
Other Science											
Nuclear Astrophysics						Nuclear Astrophysics Program at 4850L					
Cloud Physics	Collaboration & Proposal Development						Potential Vertical Shaft Experiment				
Neutron-Antineutron Oscillations	Engineering & Feasibility Studies						Potential Vertical Shaft Experiment				
Long Baseline Gravity Wave	Engineering & Feasibility Studies						Possible Deployment				

Joint Physics & Earth Science Research				
Geoneutrinos Carbon Sequestration Geothermal Energy Diurnal Earth Rotation		R&D	4850L Deployment 4850L and Above Deployment	
		Collaboration & Proposal Development	R&D	Potential Vertical Shaft Experiment
Subsurface Geoscience				
Extant Information and DB Geology and Rock Mechanics Hydrogeology Coupled Processes	Database + Core Inspections Inspections Inspections	Database + Core Surveys, Monitoring, Inspections Surveys, Monitoring, Inspections Surveys, Monitoring, Inspections	Database + Core 4850L Initial Experiments 4850L Initial Experiments 4850L Initial Experiments	Database + Core Followed by Large Block Experiments Followed by Large Block Experiments Followed by Large Block Experiments Continued and Deep Homestake Continued and Deep Homestake Continued and Deep Homestake
Subsurface Engineering				
Geotechnical Studies General Underground Construction	Inspections Inspections	Geotechnical Studies, Coring Geotechnical Studies, Coring	4850L and above 4850L and above	Continued and Deep Homestake Continued and Deep Homestake
Geobiology				
Geomicrobiology Geochemistry Biological Effects Ecology & Environmental Studies	Inspections Inspections Inspections Inspections	4850L Drill Station and Shared U/G Lab Surveys, Monitoring, Inspections Surveys, Monitoring, Inspections Surveys, Monitoring, Inspections	4850L and above 4850L and above 4850L and above	Deep (8000L) Drill Station Continued and Deep Homestake Continued and Deep Homestake Continued and Deep Homestake
				Perishable Information
				Rock Mechanics/Hydrology/Coupled Processes/Engineering Large Scale Experiments
				Geomicrobiology/ecology/biology/geochemistry Modules and Field Work, in situ work
Surface 300L 4850L and above 7400L and 8000L 4850L and/or Deeper Levels Vertical Shaft		<u>Underlined Experiments or Topics</u> received specific PAC EIP Recommendations	Dates are approximate start dates for experiment and program deployments, they are representative of beneficial occupancy or other milestones. The detailed schedule and PAC recommendations should be consulted for specific information.	