

Weapon System VIRGINIA Class Submarines			First System (BY1) Award Date									First System (BY1) Completion Date
(\$ in Millions)												
BLI: 201300	PLT	When Req'd	Prior Years	FY03	FY04	FY05	FY06	FY07	FY08	FY09	To Complete	Total
NUCLEAR PROPULSION PLANT EQUIPMENT (1)	30-72	Various	2592.0	431.3	435.0	445.0	456.0	861.5	872.4	887.6	6712.0	13692.8
ELECTRONICS EQUIPMENT (2)	44	Various	73.9	9.0	13.0	13.3	13.5	13.8	28.8	29.7	267.8	462.8
NON-NUCLEAR PROPULSION PLANT EQUIPMENT			578.1	32.2	.	10.0	34.4	36.3	75.9	79.3	729.4	1575.6
*Heat Exchanger	18	Various	17.7									17.7
Propulsor (3)	36	Various	97.0	32.2	.0	10.0	34.4	36.3	75.9	79.3	729.4	1094.5
*Main Condensers	66	Various	33.									33.0
*Switchboards Elec	18	Various	20.8									20.8
Main Propulsion Complex (4)	46	Various	355.7	.0	.0	.0	.0	.0	.0	.0	.0	355.7
Pumps & Valves	18	Various	53.9									53.9
LONG LEAD-TIME CFE (5)	24 - 42	Various	392.4	159.6	156.2	163.6	183.7	189.9	372.1	389.1	3994.9	6001.4
DETAIL DESIGN/DESIGN TRANSFER/SHIPBUILDER INTEGRATION			480.6								.0	480.6
ADVANCE CONSTRUCTION (6)			148.28								.0	148.3
OTHER (7)			3.19								.0	3.2
EOQ (8)					253.7	240.0	100.1			401.1	2030.0	3025.0
Total AP			4268.5	632.1	857.9	871.9	787.7	1101.5	1349.2	1786.8	13734.1	25389.6

*Funded as CFE verses GFE beginning with the FY01 ship.

Description:

- (1) **Nuclear Propulsion Plant Equipment AP** is required to fund long lead-time propulsion plant equipment, which is the longest lead-time equipment in the construction of nuclear attack submarines, and ensure production capability to support projected production quantities. To support the VIRGINIA Class's innovative and more efficient modular construction method, reactor plant components must be delivered earlier in the construction process than that of previous submarine classes. Under the new method, the VIRGINIA Class reactor plant will be assembled and tested before being mounted into the hull.
- (2) **Electronics Equipment AP** is required to fund the long lead time material for the Command and Control System Module (CCSM). In order to keep the CCSM out of the critical path to ship delivery and minimize the most risk to ship construction, selected electronics will be installed in this module to support construction of the CCSM.
- (3) **Propulsor AP** is required to satisfy in-yard need dates for ship delivery. FY04AP for FY05/SSN780 is zero due to DON decision to use a VIRGINIA / SEAWOLF spare.
- (4) **Main Propulsion Complex AP** is required to satisfy in-yard need dates for ship delivery and to stabilize the industrial base due to the low number of production units to contain per unit cost. The FY03/SSN778 and follow on hull Main Propulsion Complex (MPC) have been negotiated as CFE in the FY03 Multi-Year Construction Contract.
- (5) **Long Lead-Time CFE AP** is required to fund long lead time contractor furnished material including the Weapons Handling Module and the Reactor Plant Module in addition to the MPC beginning with the FY03/SSN778. These components are required early in the construction phase to meet the delivery schedule. This funding schedule reflects the negotiated MYP contract requirement for the FY04-08 hulls, thereby rendering Multi-year savings.
- (6) **Advance Construction** was required to ensure industrial base continuity at the shipbuilder in the gap year.
- (7) **Other** is for VIRGINIA Class curriculum development.
- (8) **EOQ** is for Economic Order Quantity for large lot procurements of shipbuilder material and major Government Furnished Equipment to achieve savings under the MYP contract. This funding schedule reflects the negotiated MYP contract requirement for the FY04-08 hulls, thereby rendering Multi-year savings.

Exhibit P-10, Advance Procurement Requirements Analysis (Page 2 - Budget Justification)								FY2005 President's Budget February 2004	
Appropriation (Treasury)Code/CC/BA/SBA/Item Control Number 1711 Shipbuilding and Conversion, Navy/BA 02/BLI 33201303 (TOA, \$ in Millions)						Weapon System VIRGINIA Class Submarines		P-1 Line Item Nomenclature Virginia Class Submarine	
	PLT	QPA	Unit Cost	FY04 Qty	FY04 Contract Forecast Date	FY04 Total Cost Request	FY05 Qty	FY05 Contract Forecast Date	FY05 Total Cost Request
BLI: 201300 End Item				1			1		
NUCLEAR PROPULSION PLANT EQUIPMENT (1)	30-72	1 Shipset	435.0	1 Shipset	1st Qtr FY04	435.0	1 Shipset	1st Qtr FY05	445.0
ELECTRONICS EQUIPMENT (2)	44	1 Lot	NA	1 Lot	various	13.0	1 Lot	various	13.3
PROPULSOR (3)	36	1 Shipset	.0	1 Shipset	various	.0	1 Shipset	various	10.0
LONG LEAD-TIME CFE (4)	24-42	1 Lot	NA	1 Lot	1st Qtr FY04	156.2	1 Lot	1st Qtr FY05	163.6
EOQ (5)			NA		various	253.7		various	240.
Total AP						857.9			871.9
Description:									
<p>(1) Nuclear Propulsion Plant Equipment AP is required to fund long-lead time propulsion plant equipment, which is the longest lead-time equipment in construction of nuclear attack submarines. FY05 AP is required for the FY07 ship.</p> <p>(2) Electronics Equipment AP is required to fund long lead time material for the Command and Control System Module (CCSM). Because the CCSM will be on critical path to ship delivery and present the most risk to ship construction, selected electronics will be installed in this module to support construction of the CCS. FY05 AP is required for the FY06 ship.</p> <p>(3) Propulsor AP is required to satisfy in-yard need dates for ship delivery. FY04 AP for the FY05/SSN780 is zero due to DON decision to utilize a VIRGINIA / SEAWOLF spare.</p> <p>(4) Long Lead-Time CFE AP is required to fund long lead time contractor furnished material including the Weapons Handling Module and the Reactor Plant Module in addition to the MPC beginning with the FY03/SSN778. These components are required early in the construction phase to meet the delivery schedule. This funding schedule reflects the negotiated MYP contract requirement for the FY04-08 hulls, thereby rendering Multi-year savings.</p> <p>(5) Economic Order Quantity is for Economic Order Quantity for large lot procurements of shipbuilder material and major Government Furnished Equipment to achieve savings under the MYP contract. This funding schedule reflects the negotiated MYP contract requirement for the FY04-08 hulls, thereby rendering Multi-year savings.</p>									