

From: Robert Palla
To: jojones@sandia.gov
Date: 05/24/2007 7:10:00 AM
Subject: Cost Benefit Equation Terms

Joe - I am not sure whether I had provided you with this table previously. It shows how each of the terms in the cost benefit equation are derived, and their relative significance for Pilgrim. Bob

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Net Value = (APE + AOC + AOE + AOSC) - COE, where

APE = averted public exposure costs

AOC = averted offsite property damage costs

AOE = averted occupational exposure costs

AOSC = averted onsite costs

= averted cleanup and decontamination costs (ACC) + averted replacement power costs (ARPC)

COE = cost of enhancement

Cost Factor	Significance	NUREG/BR-0184 Section	Related Parameters	Value If All Internally-Initiated Core Damage Events at Pilgrim Are Eliminated
APE	Offsite exposure	5.7.1	Δ P-Rem (from MACCS2)	\$314K
AOC	Offsite economic	5.7.5	Δ Offsite Economic Cost Risk - OECR (from MACCS2) From 12/12/2006 Entergy letter, Attachment C, Table E.1-15: - CAPB-12: \$4.85E6/event - CAPB-14: \$4.96E9/event - CAPB-15: \$18.0E9/event - frequency-weighted sum for all CAPBs = \$8.21E9/event From NUREG/BR-0184, Table 5.6 (1990\$ costs, within 50 miles): - average for all NUREG-1150 plants = \$2.46E8/event - highest NUREG-1150 plant (Peach Bottom) = \$2.71E9/event	\$566K
AOE	Onsite exposure	5.7.3	Immediate occupational dose (3,300 P-Rem) Long term occupational dose (20,000 P-Rem)	\$2K
ACC	Onsite economic	5.7.6.1	Onsite cleanup and decontamination cost (\$1.1E9 single event, PW)	\$76K
ARPC	Onsite economic	5.7.6.2	Plant power level	\$51K