

Calculation of Net Present Value (NPV) for CAMC charges

The offer will be evaluated and inter-se ranking will be decided as per sum-total of cost of equipment and Comprehensive AMC for 5 years (After expiry of Comprehensive warranty period of 03 years). In order to equitably compare different CAMC charges for different years, the concept of NPV (Net Present Value) will be used at a predetermined rate of discounting to bring the CAMC charges at the same footing in the assessment. The discounting factor @10% will be applied on annual CAMC charges for evaluation of bid offer. The formula for arriving at Net Present Value (NPV) will be as follows:

$NPV = CAMC / (1+R/100)^n$ where "CAMC" is the CAMC charges quoted for an year and "R" is the discounting factor which is 10% for this case and "n" is the year of CAMC after expiry of Comprehensive Warranty.

Formula for calculation of Net Present Value (NPV) of CAMC charges for 05 years after **warranty period of 03 years** for purpose of Comparative Evaluation of offers.

NPV for total CAMC for 05 years after expiry of 03 years Comprehensive warranty =

$$P1 \times \{1/(1+R/100)^4\} + P2 \times \{1/(1+R/100)^5\} + P3 \times \{1/(1+R/100)^6\} + P4 \times \{1/(1+R/100)^7\} + P5 \times \{1/(1+R/100)^8\}$$

where "P1 is the CAMC charges quoted for first year after expiry of comprehensive warranty, P2 is the CAMC charges quoted for second year after expiry of comprehensive warranty & so on. "R" is the discounting factor which is taken as 10%.

CAMC Year	CAMC Charges quoted	NPV Factor for CAMC charges $\{1/(1+R/100)^n\}$	NPV of CAMC charges = Column 2 X Column 3
Column 1	Column 2	Column 3	Column 4
CAMC Charges for 1 st year (After 3 year warranty)	P1	$1/(1.1)^4$ = 0.6830135	
CAMC Charges for 2 nd year	P2	$1/(1.1)^5$ = 0.6209213	
CAMC Charges for 3 rd year	P3	$1/(1.1)^6$ = 0.5644739	
CAMC Charges for 4 th year	P4	$1/(1.1)^7$ = 0.5131581	
CAMC Charges for 5 th year	P5	$1/(1.1)^8$ = 0.4665074	
Total NPV of CAMC charges for purpose of evaluation of lowest offer =			sum of column 4

Note: R = Rate of Discount (taken as 10%).