(i) $UEC = 365(n(E_{24} - 5P_m - E_{batt})\frac{24}{t_{cd}} + (P_m(t_{a\&m} - (t_{cd} - 5)n) + (P_{sb}t_{sb}) +$

$(P_{off}t_{off}))$ or,

(ii) $UEC = 365(n(E_{24} - 5P_m - E_{batt})\frac{24}{(t_{cd}-5)} + (P_{sb}t_{sb}) + (P_{off}t_{off}))$