Table 5: Computation of NPV for CFL

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Number of incandescent bulb** | **Power rating of incandescent bulb** | **Number of CFL** | **Power rating of CFL** | **Average daily duty cycle** |
| 1 | 60W | 1 | 20W | 6 hours |
| Annual electricity consumption for incandescent = 0.06kW \* 6hours \* 365 days = 131.4 kWh/year | | | | |
| Annual electricity consumption for CFL = 0.02kW \* 6 hours \* 365 days = 43.8 kWh/year | | | | |
| Annual electricity price for incandescent (year 1) = 131.4 kWh \* $0.12/kWh = $15.77 | | | | |
| Annual electricity price (cost) for CFL (year 1) = 43.8 kWh/year \* $0.12/kWh = $5.26 | | | | |
| Benefit of CFL in year 1 = 15.77 – 5.26 = $10.51 | | | | |
| Net cash flow (NCF) = Bt – Ct = 10.51 – 5.26 = $5.25 | | | | |
| NPV = 5.25/(1+0.05)1 = $5 | | | | |