6.4 Total capital cost

The total capital cost has been estimated to be Rs. 10.75 Crores. The detail of the capital cost estimation is shown in table 6.3.

6.5 Operating cost and profitability

The total operating cost has been estimated and given in table 6.4. There is no need for any additional manpower due to the proposed unit addition. The operating cost is prohibitive due to higher compression cost. Total operating cost is Rs. 75 lakhs per annum.

6.6 Revenue Generation

The extra revenue generation from the installing of the unit is Rs.2.0 cr.

6.7 Financial analysis & cash flow

The net present value is negative and internal rate of return of return is just 4 %. The flare gas recovery system is not economically viable. The cash flow statements are given in table 6.5.

Flare gas quantity: 30,000 SCMD

IRR	**: 7 %**
NPV	**: -221.92 lakhs**
Payback period	**: 11 years**
ROI	**: 6.19%**

- The recovered flare gas has been proposed to be used as fuel gas. The fuel gas used for purging the elevated flare stack & molecular seal is to be continued.
- Economic analysis of the Flare Gas Recovery System has been carried out. The Scheme is not economically viable due to reduced flare gas quantity and higher compression cost. The internal rate of return is estimated as 4% per annum. Net present value is negative. .
- The flare gas recovery system may be considered in case there is need for extra fuel gas requirement or after implementation of market determined price.
- Notional cost of the study comes to Rs.8.70 lakhs

7.2 Recommendation

- For reducing the purge gas quantity M/s EIL may be consulted before stopping the continuous purge at different unit ends.
- The Flare Gas Recovery Scheme proposed by the Hazira Plant is economically not viable at the current gas price of Rs 2074 and becomes viable at the gas price of above Rs.2800. However the scheme may be implemented, keeping in view of future environmental norms.