Net present value calculation

Using this online NPV Calculation Tool http://finance. thinkanddone. com/online-n... we get the following NPV at 15%

Net Cash FlowsCF0 = -3000000CF1 = 1100000CF2 = 1450000CF3 = 1300000CF4 = 950000

Discounted Net Cash FlowsDCF1 = 1100000/(1+0. 15)^1 = 1100000/1. 15 = 956521. 74DCF2 = 1450000/(1+0. 15)^2 = 1450000/1. 3225 = 1096408. 32DCF3 = 1300000/(1+0. 15)^3 = 1300000/1. 52087 = 854771. 1DCF4 = 950000/(1+0. 15)^4 = 950000/1. 74901 = 543165. 58

NPV CalculationNPV = 956521. 74 + 1096408. 32 + 854771. 1 + 543165. 58 -3000000 NPV = 3450866. 74 -3000000NPV = $450, 866. 74

Using this online IRR Calculation Tool http://finance. thinkanddone. com/online-i... we get the following IRR

Discounted Net Cash Flows at 19%DCF1 = 1100000/(1+19%)^1 = 1100000/1. 19 = 924369. 75DCF2 = 1450000/(1+19%)^2 = 1450000/1. 4161 = 1023938. 99DCF3 = 1300000/(1+19%)^3 = 1300000/1. 68516 = 771440. 56DCF4 = 950000/(1+19%)^4 = 950000/2. 00534 = 473735. 31

NPV Calculation at 19%NPV = 924369. 75 + 1023938. 99 + 771440. 56 + 473735. 31 -3000000 NPV = 3193484. 61 -3000000NPV at 19% = 193484. 61

Discounted Net Cash Flows at 24%DCF1 = 1100000/(1+24%)^1 = 1100000/1. 24 = 887096. 77DCF2 = 1450000/(1+24%)^2 = 1450000/1.

5376 = 943028. 1DCF3 = 1300000/(1+24%)^3 = 1300000/1. 90662 = 681833. 44DCF4 = 950000/(1+24%)^4 = 950000/2. 36421 = 401824. 92

NPV Calculation at 24%NPV = 887096. 77 + 943028. 1 + 681833. 44 + 401824. 92 -3000000 NPV = 2913783. 23 -3000000NPV at 24% = -86216. 77

IRR with Linear InterpolationiL = 19%iU = 24%npvL = 193484. 61npvU = -86216. 77

irr = iL + [(iU-iL)(npvL)] / [npvL-npvU]irr = 0. 19 + [(0. 24-0. 19)(193484. 61)] / [193484. 61–86216. 77] irr = 0. 19 + [(0. 05)(193484. 61)] / [279701. 38]irr = 0. 19 + 9674. 2305 / 279701. 38irr = 0. 19 + 0. 0346irr = 0. 2246irr = 22. 46%

The company should accept this project since its IRR is higher than the required rate of return and it has a positive NPV