# INDEPENDENT POWER PLANT VALUATION USING DISCOUNTED CASH FLOW TECHNIQUE

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## TOPIC 6 - DIFFERENCE BETWEEN EQUITY IRR AND PROJECT IRR

### 1. INTRODUCTION AND OBJECTIVE

This article attempts to discuss on the difference between equity IRR and project IRR which are commonly computed in the appraisal of an independent power plant when discounted cash flow technique is used.

Type of Cash Flow	Explanation
	The Internal Rate of Return (IRR), as
Free Cash Flow to Equity (FCFE)	determined using the net cash flow from
	FCFE is known as the equity IRR.
Free Cash Flow to Firm (FCFF)	The Internal Rate of Return (IRR), as
	determined using the net cash flow from
	FCFF is known as the project IRR

### 2. INTERPRETATION OF RESULTS

**EQUITY IRR** 

EQUITY IRR - COST OF EQUITY	INVESTMENT DECISION
Negative	This means that based on the set of assumptions used, the independent power plant under evaluation is unable to generate the required rate of return by the investor / project sponsor. Hence, the decision should be to reject the investment.
Zero	This means that based on the set of assumptions used, the independent power plant under evaluation generates the required rate of return by the investor / project sponsor.
Positive	This means that based on the set of assumptions used, the independent power plant under evaluation generates more than the required rate of return

by the investor / project sponsor.
Hence, the decision should be to accept
the investment project based solely
from financial perspective.

## PROJECT IRR

PROJECT IRR - WEIGHTED AVERAGE COST OF CAPITAL (WACC)	INVESTMENT DECISION
Negative	This means that based on the set of assumptions used, the independent power plant under evaluation is unable to generate the required rate of return by the providers of capital based on the proposed target funding structure. Hence, the decision should be to reject the investment.
Zero	This means that based on the set of assumptions used, the independent power plant under evaluation generates the required rate of return by the providers of capital based on the proposed target funding structure.
Positive	This means that based on the set of assumptions used, the independent power plant under evaluation generates more than the required rate of return by the providers of capital based on the proposed target funding structure. Hence, the decision should be to accept the investment project based solely from financial perspective.

As Equity IRR represents the degree the returns of a project to the providers of equity capital, i.e. Cost of Equity, which is higher than WACC, for a given set of computation, Equity IRR is always higher than Project IRR, for profitable investments.

#### THANKS FOR READING.

This article is prepared by Ong Tee Chin, CFA, FRM, and represents the view of the author. He can be contacted at ong@atlantiscapital.org for any further enquiries on the contents of this article.

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