

# A Study on Capital Budgeting At Apspdcl, Tirupati.

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Date of Submission: 25-04-2024

Date of Acceptance: 04-05-2024

Date of Acceptance. 04-03-2024

# **ABSTRACT:**

The project entitled "A STUDY ON CAPITAL BUDGETING IN APSPDCL, TIRUPATI". Capital budgeting is one of the most Important areas of financial management. There are several techniques commonly used to evaluate capital budgeting projects namely the payback period, Average rate of return, Net present value, Internal rate of return and profitability index. Data analysis was carried out and findings are listed. Suitable suggestion has been provided. The tools used In this study where pay-back period, Average rate of return, Net present value, Internal Rate of Return and probability index. This study also gives an overall picture of financial position of the firm for five years. From the study, we found that the financial position of the firms satisfactory.

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# I. NTRODUCTION

'The capital budgeting is essentially a list of what management believes to be worthwhile projects for the acquisition of new assets together with the estimated cost of each project."

"Capital Budgeting is a long term planning for making and financing proposed capital outlays."

An efficient allocation of capital is the most important finance functions in modern times. It involves decisions to commit firm's funds to long-term asserts. Such, decisions are tend to determine the value of company / firm by influencing its growth profitability & risk. Investment decisions are generally known as capital budgeting or capital expenditure decisions. It is clever decisions to invest current in the long term assets expecting long-term benefits firm's investment decision would generally include expansion, acquisition, modernization and replacement of long-term assets.

II. REVIEW OF LITERATURE

Weerakoon Banda Yatiwelle Kolaralage (2014)

This study looks at a number of variables and associations related to capital budgeting practices in large listed companies in Sri Lanka. The Investigation revealed that the following factors are utilised to assess investment projects: net present value, accounting rate of return, payback duration, internal rate of return, and profitability index.

# Klinowski (2017)

In the financial analysis, a crucial step in capital budgeting, the profitability of individual projects is evaluated using a combination of straightforward techniques that do not take time value of money into account and sophisticated techniques (discounting) that do take the risk of pursuing the particular projects into consideration.

# **III. RESEARCH METHODOLOGY** 3.1 NEED FOR THE STUDY:

• The project study is under taken to understand and analyse the Capital Budgeting process in Southern Power Distribution Company Limited, which gives main exposure to practical implication of theory knowledge and also this study helps to understand the company takes long-term investment decisions

# **3.2 SCOPE OF THE STUDY:**

The efficient allocation of capital is the most important financial in the modern times. The study covers the calculation of pay-back period, Average rate of returns, net present value, Internal rate of return, profitability index etc. Also the study includes the decisions as to be made for investment process. These percentages help in analyzing the funds for investment purpose.



# **3.3 OBJECTIVES OF THE STUDY :**

1. To know APSPDCL's current capital budgeting practices.

2. To Evaluate the effectiveness of capital budgeting techniques.

3. To Assess the impact of capital budgeting decisions on financial performance.

#### **3.4 RESEARCH DESIGN:**

Research methodology is a way to systematically solve the research problem. it may be understood as a science of studying now research is done systematically. In that various steps, those are generally adopted by a researcher in studying his problem along with the logic behind them.

Data collection is important step in any project and success of any project will be largely depend upon now much accurate you will be able to collect and how much time, money and effort will be required to collect the necessary data, this is also important step. Data collection plays an important role in research work. without proper data available for analysis you cannot do the research work accurately.

# **Primary Data**

When data is gathered first from firsthand accounts or empirical evidence, it is referred to as primary data, especially when it comes to study.

#### Secondary Data

The secondary data collected from published manuals, records, brochures, files of the organization and books, reports etc **Tools:** 

- Payback Period
- Average Rate of Return
- Net present value
- Internal Rate of Return
- Probability ndex

#### 3.5 LIMITATIONS OF THE STUDY

- 1. The study is conducted in a short period, which was not detailed in all aspects.
- 2. All the techniques of capital budgeting are not used in company. Therefore, it was possible to explain only few methods of capitali budgeting.
- 3. The Information provided in the company balance sheet is only the data source available.

#### **Data Sources:**

#### IV. DATA ANALYSIS AND INTERPRETATION: -PROJECT UNDERTAKEN BY APSPDCL, TIRUPARTI

| S NO | PROJECT NAME        | Budget Estimates Rs | Estimated life period | Tax | Present      |
|------|---------------------|---------------------|-----------------------|-----|--------------|
|      |                     |                     |                       |     | valve Factor |
| 1    | 33/11 KV Thukivakam | 1003500             | 5                     | 35% | 10%          |
|      | sub station         |                     |                       |     |              |
| 2    | 33/11 KV            | 5921800             | 4                     | 35% | 10%          |
|      | Gajulamandyam sub   |                     |                       |     |              |
|      | station             |                     |                       |     |              |

# EATIMATION OF PROJECTED NPAT

| S NO | PROJECT NAME        | 2018-19 | 2019-20 | 2020-21 | 2021-22 | 2022-23 | TOTAL   |
|------|---------------------|---------|---------|---------|---------|---------|---------|
| 1    | 33/11 KV Thukivakam | 348000  | 63400   | 420000  | 280000  | 320000  | 2002000 |
|      | sub station         |         |         |         |         |         |         |
| 2    | 33/11 KV            | 140800  | 1722000 | 1460000 | 1623000 | 2022000 | 8235000 |
|      | GajulamandyAM sub   |         |         |         |         |         |         |
|      | station             |         |         |         |         |         |         |

# CALCULATION OF PAY BACK PERIOD

| YEAR    | CASH IN FLOWS | CUMULATIVE CASH INFLOWS |
|---------|---------------|-------------------------|
| 2018-19 | 243761        | 243761                  |
| 2019-20 | 429661        | 673422                  |
| 2020-21 | 290561        | 963983                  |
| 2021-22 | 199561        | 1163544                 |
| 2022-23 | 225561        | 1389105                 |



#### PAY BACK PERIOD= Current year + difference in cash flows / net year cash flows = 3 YEARS 2 months

# PAY BACK PERIOD

| NAME                               | PAY BACK PERIOD |
|------------------------------------|-----------------|
| 33/11 KV Thukivakam sub station    | 3.19            |
| 33/11 KV Gajulamandyam sub station | 4.91            |

# GRAPH: PBP



# **INTERPRATATION: -**

The company standard payback period is 5 years, from the above analysis, both projects 1 & 2

are less than standard payback period, so both projects are recommended to the company.

# CALCULATION OF AVARAGE RATE OF RETURN

| YEAR    | net profit after taxes | cumulative cash in flows |
|---------|------------------------|--------------------------|
| 2018-19 | 348000                 | 1101737                  |
| 2019-20 | 634000                 | 2407574                  |
| 2020-21 | 420000                 | 3543111                  |
| 2021-22 | 280000                 | 4784898                  |
| 2022-23 | 320000                 | 6285435                  |

**ARR**=AVARAGE PAT/AVAREGE INVESTMENT\*100 ARR= 45.37

# AVERAGE RATE OF RETURN

| NAME                               | ARR   |
|------------------------------------|-------|
| 33/11 KV Thukivakam sub station    | 45.37 |
| 33/11 KV Gajulamandyam sub station | 24.45 |



International Journal of Advances in Engineering and Management (IJAEM) Volume 6, Issue 04 Apr. 2024, pp: 1252-1258 www.ijaem.net ISSN: 2395-5252





# **INTERPRETATION: -**

From the above graph the standard ARR company 20%. Both project 1&2 are greater than

# CALCULATION OF NET PRESENT VALUE NPV@ 10%

standard ARR are both project accepted for investment.

|         | )                        |             |       |          |               |
|---------|--------------------------|-------------|-------|----------|---------------|
| YEAR    | CASH INFLOWS after taxes | PRESENT     | VALUE | INTRESTE | PRESENR VALUE |
|         |                          | VALUE @ 109 | 6     |          |               |
| 2018-19 | 1003500                  | 1           |       |          | 1003500       |
|         |                          |             |       |          |               |
| 2019-20 | 243761                   | 0.909       |       |          | 221579        |
|         |                          |             |       |          |               |
| 2020-21 | 429661                   | 0.826       |       |          | 354900        |
|         |                          |             |       |          |               |
| 2021-22 | 290561                   | 0.751       |       |          | 218211        |
|         |                          |             |       |          |               |
| 2022-23 | 1995613                  | 0.682       |       |          | 136101        |
|         |                          |             |       |          |               |

**NPV:** 67139

# NET PRESENT VALUE

| NAME                               | NPV   |
|------------------------------------|-------|
|                                    |       |
| 33/11 KV Thukivakam sub station    | 67139 |
| 33/11 KV Gajulamandyam sub station | 66436 |





# **INTERPRETATION: -**

From the above graph NPV project 1&2 are greater than the NPV are both project accepted for investment company.

# CALCULATION OF INTERNAL RATE OF RETURN

IRR@ 15%

| YEAR    | CASH FLOWS | PV % 15% | PV OF NET CASH FLOWS |
|---------|------------|----------|----------------------|
| 2018-19 | 1003500    | 1.00     | 1003500              |
| 2019-20 | 24376      | 0.870    | 212072               |
| 2020-21 | 429661     | 0.756    | 324824               |
| 2021-22 | 290561     | 0.658    | 191189               |
| 2022-23 | 199561     | 0.572    | 114149               |
|         |            |          |                      |
| NPV     | I          | I        | 49162                |

# INTERNAL RATE OF RETURN

| NAME                               | IRR   |
|------------------------------------|-------|
|                                    |       |
| 33/11 KV Thukivakam sub station    | 12.88 |
|                                    |       |
| 33/11 KV Gajulamandyam sub station | 1.14  |
|                                    |       |
|                                    |       |



International Journal of Advances in Engineering and Management (IJAEM) Volume 6, Issue 04 Apr. 2024, pp: 1252-1258 www.ijaem.net ISSN: 2395-5252



# **INTERPRETATION:-**

From the above graph the IRR project 1 is 12.8 is greater than is accepted project 2 is 1.14 less than is rejected investment.

# CALCULATION OF PROFITABILITY INDEX

| YEAR    | CASH IN FLOWS | PV % 10% | PV OF NET CASH FLOWS |
|---------|---------------|----------|----------------------|
| 2018-19 | 1003500       | 1        | 1003500              |
| 2019-20 | 243761        | 0.909    | 221579               |
| 2020-21 | 429661        | 0.826    | 354900               |
| 2021-22 | 290561        | 0.751    | 218211               |
| 2022-23 | 199561        | 0.682    | 136101               |
| NPV     | <u>г</u>      |          | 67139                |

# **PROFITABILITY INDEX**

| NAME                               | PI   |
|------------------------------------|------|
| 33/11 KV Thukivakam sub station    | 1.07 |
|                                    |      |
| 33/11 KV Gajulamandyam sub station | 0.88 |
|                                    |      |



International Journal of Advances in Engineering and Management (IJAEM) Volume 6, Issue 04 Apr. 2024, pp: 1252-1258 www.ijaem.net ISSN: 2395-5252



# **INTERPRETATION: -**

From the above analysis project 1 greater than accepted project 2 less than it project s rejected not accepted.

# V. FINDINGS:-

It s found that,

- The company standard payback period 5 years, both project one 33/11 KV Thukivakam substation is 3.19 & project 2 33/11 KV Gajulamandyam substation is 4.91 less than standard payback period, so both the projects are recommended to the company.
- The standard ARR company is 20%. Both project 1 33/11 KV Thukivakam SUB STATION is 45.37 and project 2 33/11 KV Gajulamandyam substation is 24.45 are greater than standard ARR are both project accepted for nvestment.
- The NPV project 1 33/11 KV Thukivakam substation is 67.13 and project 2 33/11 KV Gajulamandyam substation is 63.43 same analysis for investment both project accepted.
- The IRR project 1 33/11 KV Thukivakam substation is 12.88 greater than s accepted project 2 33/11 KV Gajulamandyam substation is 1.14 less than is rejected investment.
- Profitability Index project 1 33/11 KV Thukivakam substation is 1.07 greater than accepted project 2 33/11 KV Gajulamandyam substation is 0.88 less than it project rejected not accepted.

# **VI. SUGGESTIONS:-**

As per capital Budgeting analysis, it is suggested to the company to accept project 1 33/11 KV Thukivakam substation because the PBP, ARR, NPV, IRR and PI are profitable, where as project to 33/11 KV Gajulamandyam substation as RR and PI are not profitable, So it is not recommended to the company.

#### VII. CONCLUSION: -

A single discount rate should not be for all the capital budgeting methods. The analysis s done for future estimated cash flows and benefits, there s possibility of risks that must be considered for making capital budgeting decisions. Overall project 1 is acceptable in all the investment evaluation techniques.

#### **REFERENCE:-**

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WEBSITES: -

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