“To Study and Analyze Distribution Network Channel of Product Gas Circuit Breaker (GCB) in Different Electrical Companies in Nashik & Ahmednagar District”

Dr. Vishal Waman Wagh¹

¹Assistant Professor, Aissms ion, kennedy road, near r.t.o., pune-411001

Abstract: After being in the doldrums towards the end of the 1990s, the Indian electrical equipment industry is seeing a revival in the last couple of years with the growth rate averaging 7 per cent per annum. The next two years should see a double digit growth rate, says J.G. Kulkarni, President of the Indian Electrical and Electronics Manufacturers Association (IEEMA). The Indian power sector is witnessing several changes in the business and regulatory environment. The legal and policy framework has changed substantially with the enactment of the Electricity Act 2003. In the foreseeable future, India faces formidable challenges in meeting its energy needs. Recently, a draft integrated energy policy has been issued, which addresses all aspects including energy security, access, availability, affordability, pricing, efficiency, environment and after sales services. To meet the twin objectives of ensuring availability of electricity to consumers at competitive rates, as well as attract large private investments in the sector, a new Tariff policy has also been issued. The power sector thus offers a mixed bag of challenges and opportunities to players and NTPC would continue to review its business strategy and portfolio in light of these changes.

Keywords: Security, access, affordability, pricing, efficiency etc

I. INTRODUCTION

The Indian power sector is witnessing several changes in the business and regulatory environment. The legal and policy framework has changed substantially with the enactment of the Electricity Act 2003. In the foreseeable future, India faces formidable challenges in meeting its energy needs. Recently, a draft integrated energy policy has been issued, which addresses all aspects including energy security, access, availability, affordability, pricing, efficiency, environment and after sales services. To meet the twin objectives of ensuring availability of electricity to consumers at competitive rates, as well as attract large private investments in the sector, a new Tariff policy has also been issued. The power sector thus offers a mixed bag of challenges and opportunities to players and NTPC would continue to review its business strategy and portfolio in light of these changes.

The electricity sector in India had an installed capacity of 225.133 GW as of May 2013, the world's fifth largest. Captive power plants generate an additional 34.444 GW. Non Renewable Power Plants constitute 87.55% of the installed capacity, and Renewable Power Plants constitute the remaining 12.45% of total installed Capacity. India generated 855 BU (855 000 MU i.e. 855 TWh) electricity during 2011–12 fiscal. In terms of fuel, coal-fired plants account for 57% of India's installed electricity capacity, compared to South Africa's 92%; China's 77%; and Australia's 76%. After coal, renewal hydropower accounts for 19%, renewable energy for 12% and natural gas for about 9%.

II. OBJECTIVES

1) To Study and analyse distribution channel of product Gas Circuit Breaker (GCB) in different electrical companies.
2) To study how the middlemen works under different network channels of product Gas Circuit Breaker (GCB) in different electrical companies.

A. AREA & SCOPE

Nashik & Ahmednagar districts can be selected as research area. There is a huge scope of research in Electrical industries in Nashik and Ahmednagar districts. Most of the Companies are Multinational companies produced product Gas Circuit Breaker (GCB) can also be Export in National & International Areas of Market like For Indian subcontinent, Bangladesh, Sri Lanka and Myanmar. For Middle East, Malaysia, Thailand, South Korea, Australia.
B. Research Methodology
1) Research Method: Descriptive Research Method
2) Sampling Technique: Sequential Sampling
3) Sample Size: 200 Dealers in Nashik Ahmednagar districts
4) Data Type: Primary & Secondary data
5) Tool for Data Collection: Questionnaire for 200 Dealers

III. DATA ANALYSIS & INTERPRETATION

A. Distribution Network Channel Of The Product (Gcb)

<table>
<thead>
<tr>
<th>Distribution Network Channel</th>
<th>Excellent</th>
<th>Very Good</th>
<th>Good</th>
<th>Average</th>
<th>Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of Dealers</td>
<td>85</td>
<td>50</td>
<td>40</td>
<td>20</td>
<td>5</td>
</tr>
</tbody>
</table>

Table:-1.1

![Bar Chart](chart.png)

Fig. No: - 1.1

1) Interpretation: Fig.1.1 shows that, maximum 85 dealers said that, Distribution Network Channel of product is excellent and 50 dealers said that Distribution Network Channel of product is very good.

B. Type Of Distribution Network Channel Of The Product (Gcb)

<table>
<thead>
<tr>
<th>Type of Distribution Network Channel</th>
<th>Zero Level Channel</th>
<th>First Level Channel</th>
<th>Second Level Channel</th>
<th>Third Level Channel</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of Dealers</td>
<td>25</td>
<td>80</td>
<td>90</td>
<td>5</td>
</tr>
</tbody>
</table>

Table:-1.2
1) **Interpretation**:- Fig. 1.2 shows that, maximum 90 dealers said that, they used second level channel to distribute product (GCB) and 80 dealers said that, they used first level channel to distribute product (GCB).

C. **Competition Level Created After Distribution Of Product (Gcb) In Distribution Sector**

<table>
<thead>
<tr>
<th>Competition Level</th>
<th>Increased Competition between Dealers &amp; Distributors</th>
<th>Increased Participation in turnkey contract by manufacturers</th>
<th>Emergence of new players</th>
<th>No Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of Dealers</td>
<td>125</td>
<td>35</td>
<td>30</td>
<td>10</td>
</tr>
</tbody>
</table>

Table No: - 1.3
D. Impact Of Distribution Of Product (GCB) On Organisation Structure

Table No: - 1.4

<table>
<thead>
<tr>
<th>Impact of distribution of GCB on Organization Structure</th>
<th>Very High</th>
<th>High</th>
<th>Medium</th>
<th>Low</th>
<th>Negligible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greater Accountability</td>
<td>100</td>
<td>25</td>
<td>35</td>
<td>25</td>
<td>15</td>
</tr>
<tr>
<td>Organization Structure makes strong</td>
<td>120</td>
<td>30</td>
<td>30</td>
<td>15</td>
<td>5</td>
</tr>
<tr>
<td>Change in procurement methods</td>
<td>90</td>
<td>35</td>
<td>30</td>
<td>25</td>
<td>20</td>
</tr>
<tr>
<td>Greater Reliability and Flexibility</td>
<td>110</td>
<td>50</td>
<td>20</td>
<td>10</td>
<td>10</td>
</tr>
</tbody>
</table>

Fig. No:-1.4

1) Interpretation: Fig. shows that, maximum 120 dealers said that, Impact of GCB distribution on organisation is very high to make organisation strong and 110 dealers said that, Impact on organisation is very high to make organisation reliable and flexible.
E. Rating About Key Products Required In The Distribution Sector

<table>
<thead>
<tr>
<th>Key Products required in the Distribution Sector</th>
<th>Always</th>
<th>Mostly</th>
<th>Very Often</th>
<th>Sometimes</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transformer</td>
<td>100</td>
<td>50</td>
<td>30</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Switchgear (GCB)</td>
<td>125</td>
<td>30</td>
<td>25</td>
<td>15</td>
<td>5</td>
</tr>
<tr>
<td>Control Panel</td>
<td>95</td>
<td>40</td>
<td>30</td>
<td>20</td>
<td>15</td>
</tr>
<tr>
<td>Energy Metering</td>
<td>80</td>
<td>50</td>
<td>30</td>
<td>25</td>
<td>15</td>
</tr>
<tr>
<td>Capacitor</td>
<td>75</td>
<td>45</td>
<td>35</td>
<td>25</td>
<td>20</td>
</tr>
<tr>
<td>SCADA Solutions</td>
<td>85</td>
<td>45</td>
<td>30</td>
<td>30</td>
<td>10</td>
</tr>
</tbody>
</table>

Table No:-1.5

Fig. No:-1.5

1) **Interpretation:** Fig. 1.5 shows that, maximum 125 dealers said that, Switchgear (GCB) is the key product which is always required in the distribution sector and 100 dealers said that, Transformer is the key product which is always required in distribution sector.

IV. FINDINGS & OBSERVATIONS

1) First level (With Dealers only) and Second level (With Dealers & Distributors) of distribution network channel is mostly used to distribute product Gas Circuit Breaker(GCB).
2) Competition level between Dealers and Distributors increased after distribution of product Gas Circuit Breaker (GCB) in distribution sector.
3) Positive impact on organizational structure due to distribution of product GCB. Organisation structure makes strong and it makes more reliable and flexible.
4) Transformers and Switchgears (GCB) are the key products in the distribution sector.

V. CONCLUSION

According to data analysis, there is a competition in market for different Gas Circuit Breaker (GCB) manufactured by different competitors. With increasing industrialization and globalization the Gas Circuit Breaker (GCB) market has large scope and is
expected to increase at brisk pace in the coming future. The Distribution network channel is also expanded on large scale in the market which can work effectively and efficiently to distribute Gas Circuit Breaker (GCB) in the national and international market.

REFERENCES

[8] www.siemens.com
INTERNATIONAL JOURNAL FOR RESEARCH
IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Call: 08813907089 (24*7 Support on Whatsapp)