POWER DISTRIBUTION PRODUCTS BUSINESS

Yun Cai[1] Tanaset Morasilpin[2]
[1,2]*Graduate School, Southeast Asia University, Bangkok, Thailand*
E-mail: ko_tanaset@yahoo.com

ABSTRACT

This paper aims to introduce the business development of New Power distribution products business.The company has rich technology and talent resources of electric power products and services, and strives to become bigger and stronger in Guangdong region and then radiate to the national market. Company's main business includes fittings, smart grid, such as business, focusing on the latest national electricity industry policy guidance, the development of cutting-edge power technology, build from the supply chain to the customer's after-sale one-stop service system, through the best quality products and most perfect service for the sustainable development of the company, truly "power technology fu can better life" as the enterprise vision.

Keywords: Electric power technology, Internet marketing, platform

1. Introduction to the Company.

Established in 2016, New Power distribution products business is committed to the development of China New Era Power Technology Company‘ s power business, with deep power industry talent and technical resources, to provide power technology product development and back-end services.

The company mainly takes the major manufacturers in Guangdong as its main partners, building a series of electric power hardware services from product development to back-end services, and striving to get customers' trust through the best electric power technology and services.

2. Industry Analysis.

• In the construction of electric power projects, the demand for electric power fittings accounts for about 5% of the total investment in electric power projects, so the demand for electric power fittings is influenced by the development of the electric power engineering construction industry.

• At present, there are about 30 enterprises qualified to produce 500KV power transmission and substation fittings, 15 enterprises producing 750KV power transmission and substation fittings and 11 enterprises producing 1000KV UHV power transmission and substation fittings, all of which have strong production capacity and high management level and are in the leading position of power fittings.

• In 2022, the annual power grid investment plan of the State Grid exceeded 500 billion yuan for the first time. New energy generation accounted for an increase in the proportion of electricity, electricity load structure changes and other factors led to a significant increase in the complexity of the power grid structure, power grid to accelerate the need for upgrading and transformation significantly.

• The power industry is the most important basic energy industry in the development of the national economy, is a priority in the national economic development strategy, and plays an important role in promoting the development of the national economy and the progress of society. At present, China has reversed the electricity shortage for more than 20 consecutive years and has become the world's second largest electricity producer and consumer, with electricity supply meeting the needs of the national economy and people's lives.

• For the smart grid industry, the future development of smart grid should also be closely based on, and closely serve the needs of the national energy strategy. Specifically, the development of the grid should adapt to the development and use of clean energy, promote energy saving and emission reduction, promote the change of the grid development mode, optimise the energy structure and reasonable layout, and drive the development of energy technology industry.

1. Market Analysis and Marketing Plan.

PEST Analysis.

Political Factors. China has incorporated smart grid construction into one of its national strategic plans and has introduced a series of encouraging policies to promote the continuous and rapid development of smart grid. A series of national policies to support the construction and upgrading of smart grids will create a good policy

and market environment for the development of China's smart grid industry.

Economic factors. 1. the power industry has a state monopoly nature, with relatively stable business performance, is a capital-intensive industry, and has special advantages in terms of capital and other aspects, and can obtain sufficient financial support without having to worry about the capital chain of power grid projects.2. the intelligent distribution network industry is a livelihood industry that optimises electricity resources and can form a solid internal cycle of demand on the demand side, which can create stable economic returns.

Social Factors. With the development of the times and the popularisation of the concept of low carbon and environmental protection, new green power energy is emerging, mainly: clean energy: hydropower, wind power, photoelectricity, research on advanced energy storage technology, reduction of thermal and nuclear power, the emergence of intelligent distribution networks will reshape the productivity of the power industry and make the underlying logic of the power industry more in line with the requirements of low carbon and environmental protection in society.

Technical factors. 1. the demand for technology iteration in the electric power industry is large, although the country's basic get rid of the industry, but the update speed of electric power-related technology is slow, there is still a lot of space for market exploration in this area. 2. stimulated by policies and the rapid development of intelligent technology, the technological update of the intelligent distribution network industry will be accelerated, and more technical talents will be absorbed into the industry to promote market development.

SWOT Analysis.

Opportunity. The restructuring of electricity has been effective and the increasing maturity of new energy technologies will reshape the productivity of the power industry and bring the underlying logic of the power industry more in line with society's low carbon and environmental requirements.

Threat. 1. the power industry has a serious technology monopoly and the market is very saturated with competition in terms of patented technology, which may lead to strong industry suppression for the Division. 2. R&D talent in power technology is hard to come by and product differentiation requires strong technical and creative support.

Annual Sales and Market Share Forecast

Dimension	2022	2023	2024	2025
Average daily present value (million)	75	94	168	267
Average daily orders	58	86	115	136
Average unit conversion rate	68%	76%	84%	91%
Average daily sales (million)	35	64	89	106
Average annual sales (in millions)	462	647	868	1034

Overall marketing plan. As an emerging electric power technology-based enterprise, the core marketing concept of our company lies in making customers feel the beautiful value of electric power with high-quality electric power products and fast and precise humanized services. In this Internet era, our company will develop a marketing plan that combines online and offline precision, so that customers can intuitively understand the advantages of our company, thus generating trust and the urge to consume.

Tender pricing strategy.

Rock bottom pricing: Bid at the lowest price. Average pricing: Average price for the bids. Stage quotation pricing: Recent period price .Weighted average pricing: Weighted average of the prices. published by the exchange.

Price discounting strategy. Cash Discount: To give an account period discount or increase in price. For early payment, consider giving 5% of the profit discount. For defer payment, consider charging bank interest to offset financial expenses.

Quantity Discount: Offer bulk zero price or major customer discount according to the number. With each order to promote circulation, inventory reduction. To accumulate the amount of long-term cooperation.

Seasonal Discount: According to the different low season to give different discount. To consider off-season price reduction balance production. The factor of price increase is not considered.

Promotion Plan. 1.Strengthen new media publicity. 2.Enhance the advertising and marketing of emerging power business.

Distribution Channels. 1) Restructuring and upgrading offline service channels. 2) Make every effort to promote the "Internet+" online service hannel 3) Management Team and Company Structure.

• Management team. R&D Department, Technical Department, Marketing Department, Marketing Investment Department, Administration Department, Personnel department, Finance Department.

• Board of Directors. The main responsibilities of the Board of Directors are to formulate the overall strategic decisions and development plans of the company, to study the long-term development strategic plans of the company, to make recommendations and to give evaluation opinions. Its members mainly consist of the company's founder and co-investors.

• Advisory Board. The Advisory Board is the guiding body for the development of the project, providing ideas and planning for the overall development direction of the project. The Company's Advisory Board is composed of renowned power industry experts, scholars and leaders of relevant departments

5.Operation Plan, Production Design and Development Plan.

Early years (2016-2021).

Belonging to the planning stage of the overall strategic operation idea of this enterprise positioning, the Company sends core personnel to study the advanced R&D and management experience of monopolistic state-owned enterprises such as the State Grid, conducts research on the local market in Guangdong, relies on the company's internal talent advantage, optimises products for the latest electricity market products, and at the same time summarises the product feedback given by the market and the differences between competing products, and continuously develops catering to the good market reflection of emerging power technology products that meet the good market response and occupy the leading position in the market.

Mid-term (2022-2030)

Belonging to the operational integration stage of the Company, in this stage, the Company will focus on the transformation of the commercial value of the Company's patented technology, will launch fist products that layout key areas of the power industry, and will provide perfect support for the use of the products and after-sales maintenance. At the same time, the Company will rely on a developed internet technology platform and leverage the support of a strong data technology industry to expand channel sales to its products, develop more distribution channels and gain deeper support from consumers.

Later stage (2031-2040)

In this phase, the company will continue to consolidate a stable domestic pattern scale market, occupy a leading position in the industry, adhere to the technology-first strategy, build the company's iconic marketing model and create a power technology brand with market vitality, influence and long-term value. At the same time, increase the overseas market promotion market, join the field of power technology projects with other countries in the world, especially developed countries, so as to strengthen the upgrading, transformation and integration of enterprises into the globalization development mileage.

(1) Determining the strategic positioning of the market.The company takes the concept of "leading in science and technology" as its market positioning, striving to achieve innovation in the electric power industry through the power of science and technology, leading the development of the whole industry and reaching the vision of creating a better life through scientific and technological innovation, so the company will invest a lot of resources in R&D and design to develop and obtain differentiation advantages.

(2) Determining the layout of industrial planning.The Company has a natural advantage in terms of location in the market as it has the resources of scientific and technological talents in Guangdong, Hong Kong and Macau, and there are many local areas that are in urgent need of renewal and transformation of electrical

equipment. In addition, the national policy support advantage for the smart grid and electric power hardware industry gives the Company an advantage in industrial development, so the Company will make a more comprehensive layout in the electric power hardware and smart grid industrial line.

(3) Establishing product quality brand characteristics and advantages.The Company insists on its own unique brand strategy, in addition to the development concept of technology leading the future, it will also create an integrated online and offline all-round marketing and service system to pull apart the differences in products and services from competing companies in the market. Through meticulous operations and services, the company will be able to gain the favour and recognition of customers at a broader level.

Challenges and Risks. Market challenges. Taxation risk.Costs .The company has implemented strict financial management measures to limit unreasonable expenditure and investment under the condition of securing capital reserves. Specifically, the company will mainly use funds from market profits for technological research and development, equipment renewal, service system renovation and staff welfare enhancement. In addition, part of the company's capital costs will be used for long-term public welfare undertakings to maximise financially sound operation and make more efficient use of funds.

Intellectual Property Rights.The company strictly controls the application and use of intellectual property rights. The company dispatches a special legal team to dynamically monitor only property rights to ensure the validity and exclusivity of the use of intellectual property rights and to ensure the proper legal status of the company's intellectual property rights, and if there is any potential infringement, the company's legal department will take timely and powerful measures to stop it.

6. Financial Analysis.

Sources of funding

Sources of funding (in millions)	2022	2023	2024	2025	2026
Self-financing	26.58	30.79	56.39	72.28	86.73
Bank credit facilities	83.31	96.24	145.97	212.28	231.16
Funds from non-bank financial institutions	14.24	22.29	30.71	37.28	41.47

Cost attrition forecast table

Annual cost consumption		
Year	Annual revenue (in millions)	Cost
2022	126	38
2023	167	65
2024	232	98
2025	359	121
2026	496	149

Tax forecasts			
Year	Annual revenue (in millions)	Tax rate	Additional costs (in thousands)
2022	126	12%	15.12
2023	167	12%	20.04
2024	232	12%	27.84
2025	359	12%	43.08
2026	496	12%	59.52

Income projection table

Future income projection table					
Unit: million	2022	2023	2024	2025	2026
Sales revenue	19165	23784	28412	34021	51031.5
Advertising revenue	673	862	932	1054	1581
Other income	520	510	643	678	1017
Total revenue	20358	25156	29987	35753	53630
Cost of sales	603	501	555	621	931.5
Gross profit	19755	24655	29432	35132	52698
Operating Costs	449	502	603	682	1023
Selling expenses	279	312	354	369	553.5
Rental expenses	461	481	532	512	768
Depreciation	426	412	444	532	798
Market management	288	333	376	388	582
Public services	340	356	390	402	603
Depreciation	234	264	288	301	451.5
Office equipment	294	312	351	380	570
Total operating expenses	2771	2972	3338	3566	5349
Operating profit	16984	21683	26094	31566	47349
Taxes and fees deducted	2038	2602	3131	3788	5682
Net profit	14946	19081	22963	27778	41667

Statement of projected assets and liabilities

Balance Sheet Projections					
Unit: million	2022	2023	2024	2025	2026
Total current assets	256	384	691	1106	1880
Accounts receivable	134	201	362	579	984
Available cash	87	131	235	376	639
Net fixed assets	403	605	1088	1741	2960
Net intangible assets	231	347	624	998	1696
Long-term amortization expense	67	101	181	289	492
Debt	185	278	500	799	1359
Available equity funds	123	185	332	531	903
Accumulated surplus funds	86	129	232	372	632
Accumulated undistributed earnings	59	89	159	255	433
Gearing ratio	0.535	0.436	0.372	0.298	0.285

Cash flow projection table for the next five years

Future cash flow projection table					
Unit: million	2022	2023	2024	2025	2026
Cash balance at beginning of period	9722	11667	15167	19717	25632
Operating cash flow	17542	21051	27366	35576	46249
Margin of profit	13949	16739	21761	28289	36776
Consolidated expenses	2642	3170	4121	5358	6965
Marketing management	655	786	1022	1329	1727
Depreciation expense	1416	1699	2209	2872	3733
Total operating cash flow	9236	11083	14408	18731	24350
Cash flow from investing activities					
Office equipment	434	521	677	880	1144
Electronic products	332	398	518	673	875
Fixed assets	1221	1465	1905	2476	3219
Personal expenses	393	472	613	797	1036
Land rentals	650	780	1014	1318	1714
Total cash flows from investing activities	3030	3636	4727	6145	7988

Cash flows from financing activities					
Equity contribution	1585	1902	2473	3214	4179
Dividends	551	661	860	1117	1453
Total cash flows from financing activities	2136	2563	3332	4332	5631
Net cash flow	11935	14322	18619	24205	31466
Cash balance at end of period	21657	25989	33786	43921	57098

Investor decision analysis factors

Ratio analysis					
	2022	2023	2024	2025	2026
Sales growth rate	0	15%	20%	30%	35%
Gross margin	73.20%	80.52%	88.57%	89.46%	90.35%
Current assets	35.68%	36.04%	36.40%	36.76%	37.13%
Debt-to-asset ratio	24.31%	23.09%	21.94%	20.84%	19.80%
Return on Capital	58.40%	61.32%	64.39%	67.61%	70.99%
Asset sales	40.32%	42.34%	44.45%	46.68%	49.01%
Current Liability Asset Ratio	13.20%	13.86%	14.55%	15.28%	16.04%
Acid test	164.22%	156.01%	148.21%	140.80%	133.76%

Net present value and internal rate of return analysis

Year	Free cash flow	Present value of free cash flows
0	-842	-842
1	985	916
2	1478	1374
3	2216	2061
4	3324	3092
5	4987	4638
WACC	0.054	
Net Present Value	11238	
Discounted cash flow return	1.0325	

References.

Bai Yang, Li Ang, Xia Qing. (2016). Power marketing model and new electricity price system under the new situation. Power System Protection and Control, (05),10-16.

Best, J.W. (1977). Research in Education. Englewood Cliff, NJ: Prentice-Hall.

CAI Wenxuan. (2019) Development path of energy ecosphere of power industry chain. China Power Enterprise Management, (34), 92-93.

Chen Chen, Dong Xiaotian, Guan Wenlin, Pan Shuyan. (2017). Research on Service Model and power sale Business of Regional Power Supply Company under the situation of new power reform. Electric Technology, (10),5-12.

Chen Qingguo. (2015). Research on Marketing Strategy. Economic Research Guide, 2015, (11), 117-118.

Chen Zheng. (2019). Marketing Strategy Selection of modern enterprises based on market segmentation. Business Economic Research, (01), 65-67.

DENG J L. (2016). Concept and development model of energy Internet. Electric Power Automation Equipment, (03), 1-5.

DONG Zhaoyang, ZHAO Junhua, Wen Fushuan, Xue Yusheng. (2014). From smart grid to energy Internet: basic concept and research framework. Automation of Electric Power Systems, (15),1-11.

Du Kun. (2017). Research on the new Thinking of enterprise Marketing Strategy under the background of new Economy , China Collective Economy, (16), 20-21.

FENG Y S. (2016). Understanding China's electric power system reform: Marketization and institutional background. Business Think Tank, (05): 22-50.

Gong Mingbo, Cao Ruifa. (2019). Research on marketing model and strategy under the new situation. Agricultural Electricity Management, (05), 46-47.

Gong Shijie, Lv Qinghua, Zeng Huanfei. (2019). Research on customer satisfaction Evaluation and Service Marketing Strategy of Power supply enterprises. Resources Development and Marketing, 35(09), 1170-1176.

Gu Wanjiang, Jin Yukun, Li Zeng, Li Pingting, Li Tong, Li Xiaopeng. (2019). Research and discussion on electric power marketing system under the new situation. Journal of Agricultural Economics, (02),143-144.

Levine, A. (1978). Handbook on Undergraduate Curriculum. San Francisco: Josey-Bass.

Louis, A.A. (1959). Evaluation and Training. New York. Me Graw Hill.

Wiliam, Bergauist H. (1981). Designing Under§raduate Education, New York: Jossey Bess.