

# Forecasting of new businesses after restructuring of power industry

Young-Duk Koo, Eun-Sun Kim and Young-Seo Park, Member, KIMICS

**Abstract**—In the power industry after restructuring of Power industry will be appeared on-site type business, power retail sales business, and power wholesales business, power dealing business, customer inclination business & delivery of power facilities. Among them, power trade business, customer inclination business and on-site type business will be rapidly increased and occupied attention. In addition, it is forecasted to advent the broker, provider, market place, power marketer, system operator and generator as a main player.

Meanwhile, it needs protection of existing power industry and activation of new energy market for accomplishment of restructuring of power industry.

**Index Terms**—Restructuring of power industry, new power industry, power dealing business, customer inclination business, on-site type business, power wholesales business, power retail sales business.

## I. INTRODUCTION

Restructuring of power industry is separated by functions as generation of current vertical power industry, transmission, distribution and retailers and supply stable and low price power and assure the customers' option by introducing of competitions in development and sales parts.

This kind of competition is essentially required introducing of the power market which deals with power throw the tender and is needed various kinds of rules for fulfilling power market function including with applying of power market. The electric Enterprises Act is prescribed to separate generation of power industry, transmission, distribution and retailer that was monopolized by the Korea Electric Power Corporations in the meantime and newly-established Korea Power Exchange as the responsible of power market for restructuring of power industry.

While power industry is estimated the steady increasing of demand in 21st century, it is expected to advent the new businesses and the new business proprietors as progressing of restructuring of the power industry. Therefore, in this paper prospected these main players and new energy markets in advance and presented fostering plans about power industry by the government.

Manuscript received April 6, 2004

Young-Duk Koo, Ph.D. Senior Researcher, KISTI, Seoul, Korea. (Tel: 82-2-3299-6035, Email: ydkoo@kisti.re.kr)

Eun-Sun Kim, Senior Researcher, KISTI, Seoul, Korea. (Tel: 82-2-3299-6034, Email: kimes@kisti.re.kr)

Young-Seo Park, Ph.D. Senior Researcher, KISTI, Seoul, Korea. (Tel: 82-2-3299-6030, Email: yspak@kisti.re.kr)

## II. FORECASTING OF NEW ENERGY MARKET AS RESTRUCTURING OF POWER INDUSTRY

Under the current regulations, it is considered that it is impossible to separate electric power production and transmission in our power industry. Also, it is difficult to divide electric power production capacity by each time and impossible to deal as the market principle. It is also difficult to invest on power industry by the private enterprise due to the high investment cost from characteristic of facility.

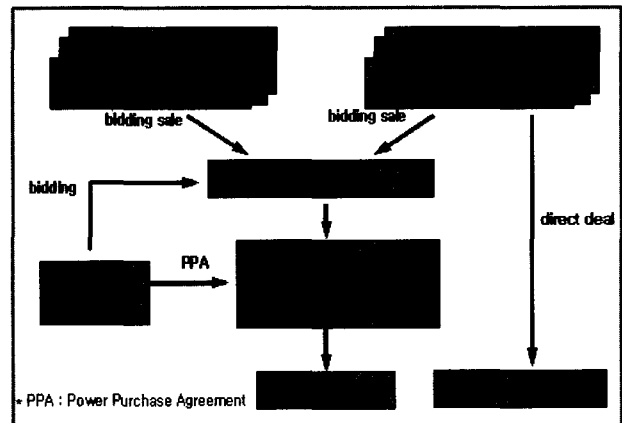


Fig. 1 Current : Generation Competition Phase (2001~2004)

However, it has appeared several furtherance factors in power industry which change new different paradigm from the past. The plan is completed which expedite participation in public monopoly industry like electric power, gas, communication, and etc as lightening restriction on overall industry.

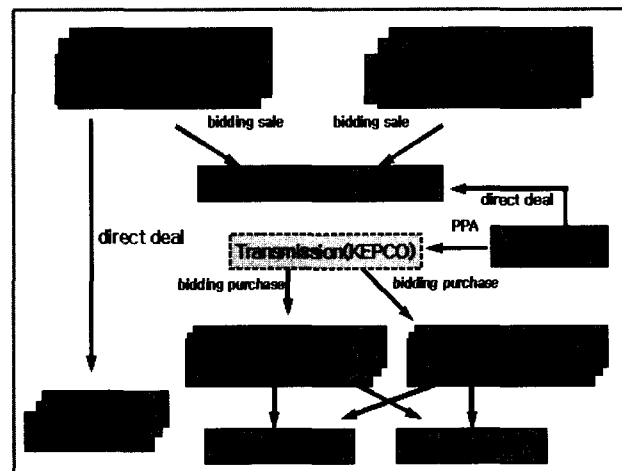


Fig. 2 Future: Retail Competition Phase(2009~)

**A. New energy market**

As restructuring of power industry, the concern on the new business is increasing by effecting of lightening restriction in energy market. In 2009 year, which will be completed restructuring of power industry by introducing of retail sales competitions, it is prospected to arise new derivation business in electric dealing.

There are on-site type business, power retail sales business, and power wholesales business, power dealing business, customer inclination business & delivery of power facilities as main new business.

On-site business is the business that consumers carry in and independent electric power facilities in their plants and generates electric power independently on behalf of the consumers. It provides low price electric power to the consumers who have high needs of reducing electric cost and at the same time executes collectively not only install construction, observation of telemeter, maintenance, management, but also allowance of main technicians.

Power retail sales business is to sell the consumers the electricity, which is generated by them or supplied, through the power transmission line of electric company. This is the business to sell the electricity to the consumers after purchasing electricity from the electric enterprises or factories.

Power wholesales business is represented by development of existing electric company using large scale of electric facility, Independent power producer and green electric enterprises.

Green power is the electric power that is low exhaust of carbon dioxide and generate in power resource of low environmental electrical load. The natural resource as the velocity of the wind and sun is its typical example. Only in case of power wholesales business it is expected to accomplish business through the Korea Power Exchange in domestic.

Power transaction business is the entirely new businesses that manages stocks and options of electricity and occur by advent of electric dealing market. This business needs professionalism about a sudden change of instruction and market dealing and capital power transmission of electric enterprise, securities, financial agencies, etc)

Customer inclination businesses develop the products as customers' needs, sell them, manage market plays and deal as restricting the segment. It needs diversity of products as expanding of consumers by restructuring of power industry and it forecast to magnify the market.

Delivery of power facilities business delivers and prevents the generation of electric power plant, transmission facilities, etc and generator promotes the improvement of facility operating rate and extension of facility renewal interval.

Meanwhile, it is deepened competitions and pricing competition since easing restrict and restructuring of power industry in Japanese energy market. Therefore, it is the actual circumstances that it is decreased benefits, diverse products as customers' needs and become narrow existing sales and sales networks in the business connected with energy.

Also, it becomes dim the boundary of existing industry fields in energy market like electric power and gas as

restructuring of power industry beside the development of on-site and it is forecasted to destroy the monopoly of region. Also, it is expected that market circumstance will be activated in energy industry since development of new technologies like fuel cell or electric store cell and promotion of the new energy.

In case of Korea, there are some differences from the Japanese restructuring of power industry in social and politic aspects, but it is similar in the aspect of magnifying services.

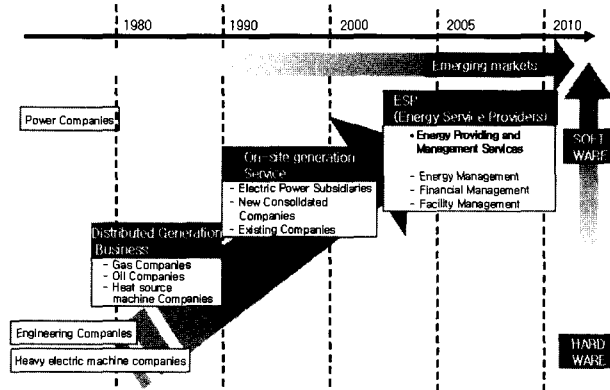


Fig. 3 Roadmap for Energy Markets

**B. Major players**

It is forecasted that it will be appear six main players on the stage like brokers, providers, market places, system operators and generators in the case of separating transmission and sales after completely accomplish restructuring of the electric industry.

American company Enron Enterprise is representative of power marketers and they purchase electricity in large quantity and trade it. Brokers are players who connect supplying and demanding and there is no risk during electricity supplying. A Broker doesn't need to register the business proprietors, so it is difficult to know the actual status.

Meanwhile professional brokers extend the area to customer inclination business doing billing service beside of the main businesses. A provider is a player who receives risk of electricity supplying and he doesn't develop the electric products. The market plays have IT technique and manage private electric trade markets.

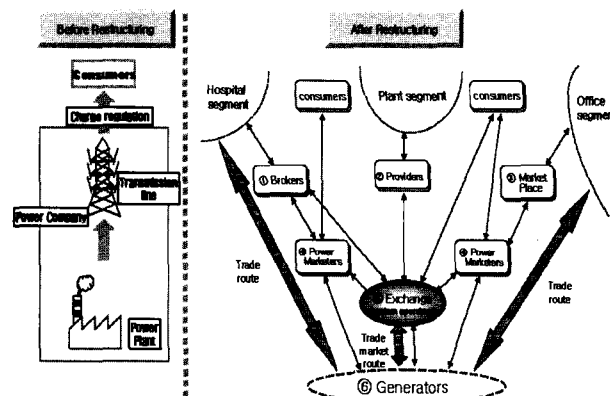


Fig. 4 Six main players of new energy market

### III. CONCLUSION AND POLITICAL PROPOSITION

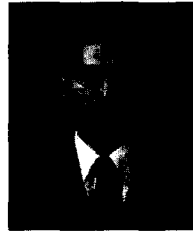
It is prospected that it is appeared on the stage power dealing businesses, customer inclination businesses, on-site type businesses, power wholesales businesses, power retail sales businesses, & delivery of power facilities businesses. Among them, power trade businesses, customer inclination businesses and on-site type businesses will be increased and occupied attention. In addition, it is forecasted to advent the brokers, providers, market places, power marketers, system operators and generators as main players.

Restructuring of the power industry intends to improvement of energy efficiency, consolidation of enterprise competition and decreasing of the electric fee. These purposes make to reorganize existing power industry to new energy businesses and will advent new players.

Meanwhile, it needs protection of existing power industry and activation of new energy market for accomplishment of restructuring of power industry. It is the essential prerequisite to establish expert organization and cultivate men power for infra construction. Also, it is need to strengthen service and activate on-site generation of electric power service industry. For activation of electric trade market, it is essential prerequisite to develop electric trading management system. And it needs to increase clarity of electric trade market for prevent risk factors like unstable electric fee and continuously accompany programs that can manage and supervise speculative factors after activation of electric trade. As electric trade, supply and demand is constituted by market principle through electric trade; it should accomplish long term system consolidation of derived products trade for protecting customers' rights and interests.

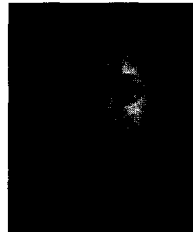
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**Young-Duk Koo**

Ph. D. member KIMICS Received Ph.D. degree in Mechanical engineering, Inchon University, Korea in 1998. He has been working for KISTI (Korea Institute of Science and Technology Information) since 1991. He has been in involved in many projects such as electric technology analysis and its comparison, and policy studies for power industry restructuring.



**Eun-Sun Kim,**

Member KIMICS Received MBA degree in Science and Technology Management, University of Strathclyde, UK in 2001. She has been working for KISTI (Korea Institute of Science and Technology Information) since 1995. She has been involved in setting up policies related Electric Technology Transfer and international R&D cooperation.



**Young-Seo Park**

Ph. D member KIMICS Received Ph. D degree in High Polymer Chemistry, Waseda University, Japan in 1993. He worked for KIET between 1984 and 1991. He has been working for KISTI (Korea Institute of Science and Technology Information) since 1991 and was a director of Industry Information Analysis Department in between 1997 and 2003.