



Renewables 'Go to Jail' in Monopoly

How South Korea's Electricity Governance
Is Stifling Its Energy Transition

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**How South Korea's Electricity Governance
Is Stifling Its Energy Transition**

Renewables ‘Go to Jail’ in Monopoly:

How South Korea’s Electricity Governance Is Stifling Its Energy Transition

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Summary

Through this report, Solutions for Our Climate seeks to diagnose the problems with Korea’s wholesale and retail electricity markets that hinder the distribution of electricity from renewable energy sources and explore solutions.

The Korea Electric Power Corporation (hereinafter, ‘KEPCO’) has a de facto monopoly on the electricity sales market, which is Korea’s retail electricity market. This means that competition in the retail market does not exist. However, as Article 3 of the Electric Utility Act and the same provision of the Addenda to the Enforcement Decree¹ of the same Act, which had restricted the issuance of electricity sales business licenses to anyone other than KEPCO, are no longer in force, at present no provision exists to guarantee KEPCO’s monopolistic status. As a matter of statute, the electricity sales market is already open. However, the public notice² of the Ministry of Trade, Industry and Energy, which had prescribed the detailed criteria for electric utility business licensing, does not provide for matters relating to the electricity sales business. There is, therefore, a problem in that, even if a license were to be applied for, it would be difficult to predict whether such a license would be issued. It seems as though additional measures would be needed to make the distribution of electricity from renewable sources possible through various electricity sales companies.

The biggest factor restricting competition in the power generation market, i.e., the wholesale electricity market, is the ‘principle of compulsory trading on the electricity market’³, which forces wholesale electricity trading to be carried out only on the electricity market established and operated by the Korea Power Exchange. Though the principle of compulsory trading on the electricity market was a system which was to be operated on a temporary basis so that

1. Act No. 6283, Presidential Decree No. 17137

2. ‘Public Notice Regarding Detailed Criteria for Power Generation Business Licensing, Electricity Tariff Calculation Standards, Permissible Margin of Error for Electric Meters and Work on Operation of Electric Power Systems,’

3. Subparagraph 13 of Article 2, Article 31 and Article 32 of the Electric Utility Act

the power generation market could become settled, this temporary arrangement has been maintained for 20 years. If anything, the principle potentially infringes on the constitutional right to self-determination of large-scale electricity consumers who have embraced RE100, as well as the business freedom and the freedom of contract of electric utility companies who wish to provide against price fluctuations; accordingly, it is time to consider abolishing the principle.

Korea, having halted midway through restructuring its electric power industry in the early 2000s, has accumulated inefficiencies in its power sector. In contrast, the majority of OECD countries' wholesale and retail electricity markets allow for the distribution of electricity from renewable sources in more diverse ways than Korea's. We should also swiftly break away from the outdated regulation of the electric power industry.

I. Introduction

We cannot buy electricity from anyone other than Korea Electric Power Corporation (hereinafter, “KEPCO”). This is because KEPCO has a de facto monopoly on electric power sales. Not only that, KEPCO owns all transmission networks and distribution networks across the Republic of Korea. In addition, as KEPCO owns 100% stakes in six power generation companies which, among them, produce 73% of total electric power, there is also a de facto oligopoly in the power generation market.⁴ This can be contrasted with other countries which opened their electric power industries early on to promote efficient operation and to develop the competitiveness of their electric power industries.

In line with the global trend of introducing competition in the electric power industry, in 2001 the Korean government carried out restructuring. By introducing competition in a vertical monopolistic electric power industry centered around KEPCO, it sought to enhance the efficiency of electric power supply, guarantee inexpensive and stable electric power supply, and widen the choice available to electricity consumers. However, contrary to the objective of introducing competitive regimes in the power generation, distribution and sales business sectors, the market restructuring stopped at the level of opening the power generation sector. Since then, the electric power industry has been in a transitional state for approximately 20 years having failed to reach the stages of wholesale competition and retail competition.

Aspects of the power generation market, on the other hand, have changed rapidly, and there is a surge in renewable energy worldwide. According to the IEA, the amount of renewable energy generated by OECD countries reached 25.8%, or approximately a quarter, of total electricity generation in 2018. This is the same as the share of electricity generated from coal (25.8%), and since 1990, renewable energy generation by OECD countries has been growing at an average rate of 2.8% per year.⁵ Electric power supply centered around larger-scale unit sources such as coal and nuclear power is being replaced by energy supply centered around smaller-scale resources.

4. Korea Power Exchange, 2019 Electricity Market Statistics, May 2019.

Likewise, there has been a rapid upward trend in Korea, with a 68.9% increase compared to the previous year as around 3.5 GW of new facilities for the generation of new and renewable energy were installed in 2018.⁶ Especially to adhere to the Paris Agreement temperature goal, Korea will need to increase the share of renewables in total electricity generation to at least half by 2030.

To decarbonize the electric power sector, diverse technologies would be needed and energy sources must be distributed, thus complicating the system. An outdated regulatory paradigm that has been designed to supply electricity through a one-way method would struggle to accommodate real-time flexibility required by a new low-carbon electric power system. Encouraging markets to facilitate dynamic trading of electricity is the way to ensure efficient operation of a low-carbon electric power industry and to minimize its costs.⁷ Another reason why electricity markets are essential for decarbonization is that they foster innovation in the electric power industry. If markets exist, new entrants can select novel low-carbon or demand management technologies. However, if no market exists, there is a possibility that vertically integrated monopolistic corporations may attempt to protect their assets from becoming stranded, slowing down the pace of decarbonization.⁸

In order for the electricity market to break away from its current rigid state, it would be necessary to allow companies besides KEPCO to sell electricity and to abolish the principle of compulsory trading on the electricity market to enhance the efficiency of the electric power industry. Through this report, we will first examine whether, under the Electric Utility Act currently in force, the electricity sales market, as the retail market, is an open market and whether there are any legal measures that should be taken to open the market. Second, we will review the constitutionality of the principle of compulsory trading on the electricity market currently in force, which forces wholesale electric power transactions to be carried out only on the electricity market operated by the Korea Power Exchange, by examining whether there is any possibility of the principle infringing on the fundamental rights of consumers and electricity utility companies.

5. IEA, Renewables information 2019, August 2019, page viii

6. Korea Energy Agency, Summary of Results of 2018 New and Renewable Energy Supply Statistics, November 2019.

7. IEA, Re-powering Markets – Market design and regulation during the transition to low-carbon power systems, 2016, page 35

8. IEA, Re-powering Markets – Market design and regulation during the transition to low-carbon power systems, 2016, page 35

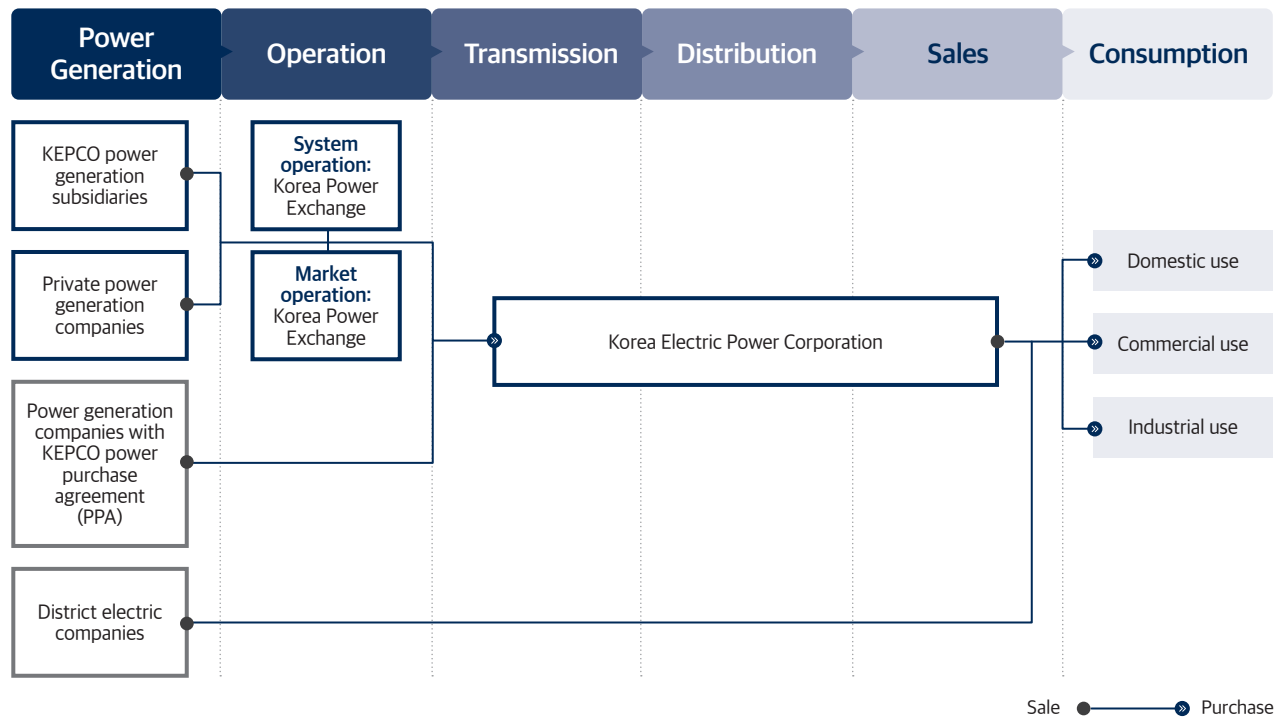
II. Background to Discussion - Structure of the Electric Power Industry and Progress of Past Restructuring

1. Electricity Market and Industry Overview

The electricity we use is produced (generation) in power plants using resources such as uranium, coal, natural gas, solar power and wind, transported to substations through high-voltage transmission networks (transmission), and reaches us (distribution) through distribution networks with the voltage having been reduced by transformers at substations. KEPCO, as the sales company, sells electricity which it has purchased from power generation companies on the Korea Power Exchange through electric power payments, by entering into contracts for the use of electricity with users (sales). However, an operator of a district electric business may sell electricity directly to users of electricity in a supply district without going through the market operated by the Korea Power Exchange (district electric business).⁹

9. An operator of a district electric business is a person who is equipped with power generation facilities that do not exceed a certain scale and supplies electricity only within a licensed supply district in line with the demand in that particular supply district. Taking into account the regional characteristics, such a company may exceptionally make sales directly to users of electricity without going through the electricity market. Since the district electric business does not take up a large share of the electricity market as a whole and differs from the ordinary features of the electricity market, it is not covered additionally in this report.

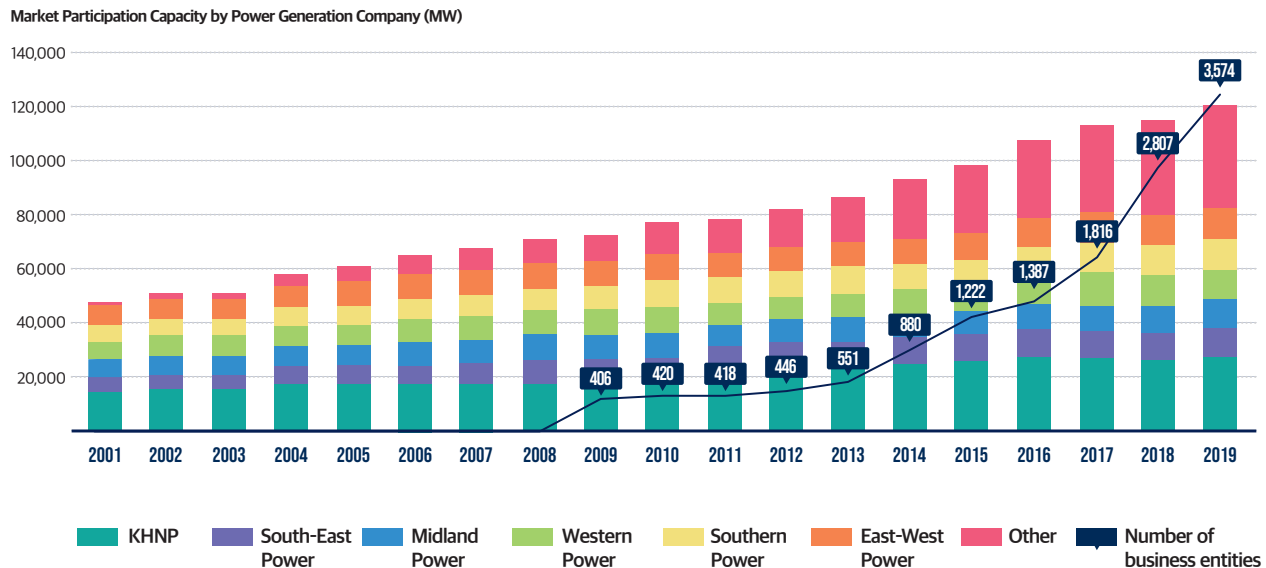
[Figure 1] Structure of Korean Electric Power Industry



Six power generation subsidiaries of KEPCO operate 69% of total power generation facilities within the country (as of 2019)

A person who carries on the business of producing electricity and supplying it to the electricity sales company is called a power generation company. It is a type of manufacturer and wholesaler. The market in which a power generation company sells electricity to a sales company constitutes a wholesale market and is called the 'power generation market.' Subsequently, persons who carry on the business of transmitting and distributing electricity that has been produced are called a transmission company and a distribution company, respectively. In Korea, KEPCO is the sole transmission and distribution company. A company that supplies electricity that has been transmitted and distributed in this way to consumers is called an electricity sales company. An electricity sales company is a type of retailer, and the retail market in which an electricity sales company sells electricity to consumers of electricity is called the 'electricity sales market.'

[Figure 2] Status of Power Generation Market (as of 2019)



Although at the time of market opening in 2001 there were ten business entities in the power generation market, as of 2020 their number exceeded 4,000, with a 400-fold increase compared to 2001.¹⁰ Of these, 3,868 or 97% are new and renewable energy generation companies. While the number of power generation companies has exploded, there is still a single sales company - KEPCO - which supplies users with electricity. In other words, while manufacturers and wholesalers have increased exponentially in number, there is virtually only one seller who distributes products to consumers.

10. Power Exchange Press Release dated June 12, 2020, “Power Exchange Enters Era of 4000 Member Companies”, <https://www.kpx.or.kr/www/selectBbsNttView.do?key=97&bbsNo=6&nttNo=20727&searchCtgy=&searchCnd=all&searchKrd=&pageIndex=1&integrDeptCode=>

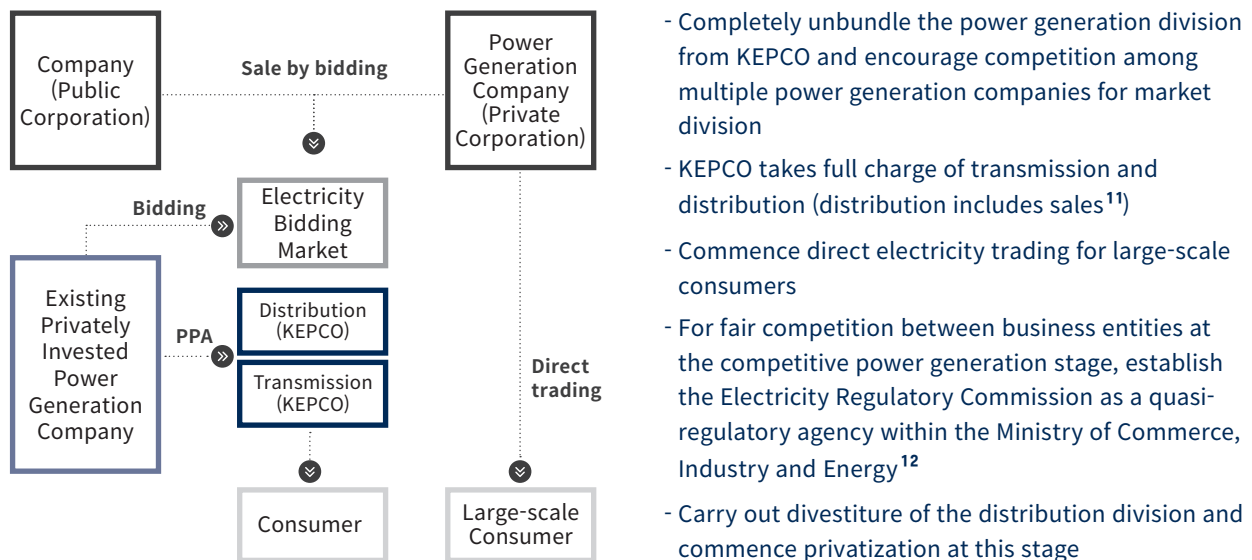
2. Progress of Restructuring the Electric Power Industry

1) Basic Plan for Restructuring the Electric Power Industry

The restructuring of Korea's electric power industry is represented by the Basic Plan for Restructuring the Electric Power Industry, which was finalized in January 1999 following a long review process starting from 1993. The key content of the basic plan was to split up generation, transmission, distribution and sales which were all being carried out together by a single entity, KEPCO, thereby dividing each of the generation, transmission, distribution and sales divisions into separate companies and providing for electricity to be supplied to consumers through the electricity market. The above basic plan consisted of a three-stage process which was to take place over approximately ten years, as shown in Table 1 below. However, for various external reasons, the restructuring exercise was suspended after the introduction of competitive power generation at Stage 1 and that state of affairs continues to this day.

[Table 1] Plan for Phased Restructuring of Electric Power Industry Established in 1999

[Stage 1] Competitive Power Generation Stage (1999 ~ 2002)

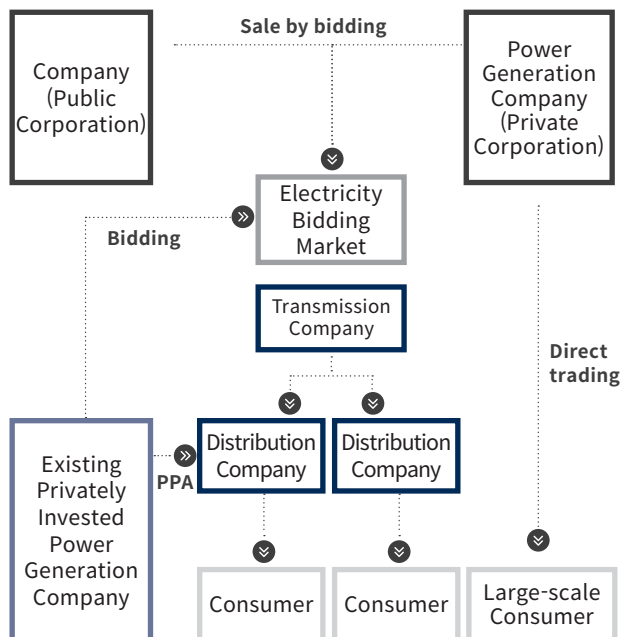


11. At the relevant time, 'distribution' was a concept that included the current 'distribution + electricity sales' divisions as a whole. In the basic plan for restructuring the electric power industry, the term 'divestiture of distribution' was used in the section on the introduction of competition in the retail electricity market without any definition of or distinction between the distribution division and the electricity sales division.

12. This included a plan to set up an Electric Power Management Authority at a future date as a completely independent regulatory agency

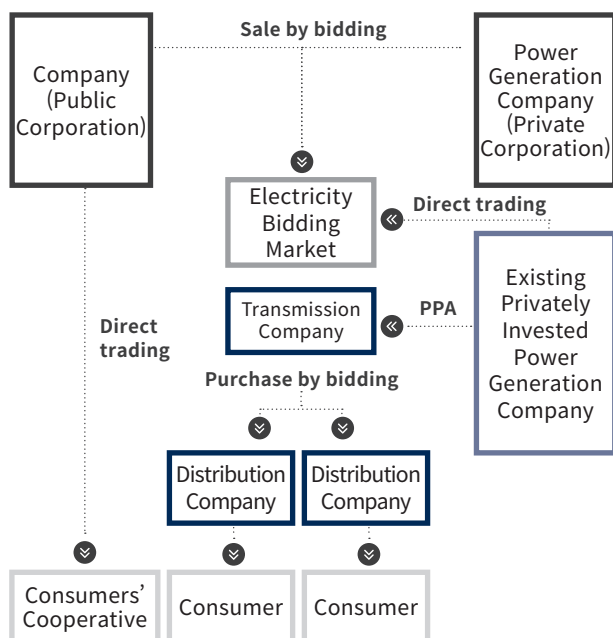
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[Stage 2] Wholesale Competition Stage (2003 ~ 2008): Suspended



- Introduce a competitive regime and implement two-way competitive bidding for electricity purchase by completely unbundling the electricity distribution division from KEPCO
- Open the transmission network to ensure that distribution companies are able to use it freely
- Operate an electricity trading system based on free competition between power generation companies and distribution companies, with each distribution company operating the distribution network under its jurisdiction as well as establishing and operating its own electricity tariff framework
- Expand the scope of direct electricity trading beyond that at Stage 1
- At this stage Korea Electric Power Corporation simply takes on the role of a transmission company

[Stage 3] Retail Competition Stage (2009): Suspended



- After January 2009, open the distribution network as well to enable general consumers to select their power generation companies directly for the supply of electric power
- It is expected that local monopolies in the distribution sector would disappear, and that new forms of electric power companies such as consumers' cooperatives and sales companies specializing in electric power would emerge. Based on the establishment of consumers' right for choice, consumer sovereignty is realized in earnest

2) Progression and Suspension of Restructuring of the Electric Power Industry

As part of such a restructuring plan, on December 23, 2000, the Electric Utility Act was amended as a whole, and the Act on the Promotion of Restructuring of the Electric Power Industry was enacted to facilitate the unbundling of KEPCO's power generation division. Then, in April 2001, KEPCO's power generation division was split up into six companies, which in turn became KEPCO's wholly-owned subsidiaries. In addition, in April 2001 the Korea Power Exchange was established in the form of a non-profit special corporation to take on the task of operating the electricity market and the electric power system.¹³ The electricity market was established both in the form of a compulsory pool and a cost-based pool.¹⁴

However, subsequent work on restructuring the electric power industry was suspended as it went through various processes due to opposition to the privatization of KEPCO's power generation subsidiaries. Subsequently, the Lee Myung-Bak administration and the Park Geun-Hye administration both attempted to proceed with matters such as the privatization of public corporations or the opening of KEPCO's sales division, but all such attempts fell through, resulting in the current state of affairs.

13. Modes of system operation are classified into a regime involving independent system operators (ISO) and another involving transmission system operators (TSO), depending on the separation or integration of the transmission owner (TO) and the system operator (SO). In Korea, the Korea Power Exchange is in charge of system operation only and the transmission network itself is owned by KEPCO. Therefore, the Korea Power Exchange is generally classified as an ISO.

14. For modes of operation of the electricity market, see 'III. 2. 2) Characteristics of and Problems with Compulsory Electricity Market' below.

III. Problems with the Electricity Market and Legal Interpretation

**CHECK
POINT**

Under the Electric Utility Act, only KEPCO may carry on the electricity sales business in a monopolistic manner.

VS

The Electric Utility Act does not grant a monopoly status to KEPCO.

1. Problems with the Retail Electricity Market - Monopoly Status of Electricity Sales Company

As considered earlier in the Introduction, at present KEPCO, a public corporation, has a de facto monopoly on the electricity sales market, which is Korea's retail electric power market. Since the restructuring of the electric power industry, which had aimed to dissolve KEPCO's monopoly and open the market completely, was suspended midway through, questions are being raised steadily as to 'whether at present the electricity sales market in the Republic of Korea is also open as a matter of law' and 'whether statutory provisions are preventing the licensing of other sales companies.' However, it is not the case that the statute currently in force guarantees a status of sole sales company just to KEPCO.

1) KEPCO's Monopoly on Electricity Sales Company Status and Legal State of Affairs

At the time of amendment of the Electric Utility Act in 2000, the amended Act and Enforcement Decree through their Addenda prohibited the issuance of electricity sales business licenses to any individual or corporation other than KEPCO for a period of three years.¹⁵ This three-year period expired in 2004. This postponed competitive selling in order to maintain the regime of KEPCO's electricity sales business monopoly on a temporary basis until its distribution division and electricity sales division could be divested in accordance with the phased plan for restructuring the electric power industry. The reason why electricity sales business licensing was restricted by statute was to restructure the electricity market in phases, with retail competition being introduced after the newly introduced electricity market had stabilized.¹⁶ In particular, in view of problems such as the restructuring schedule, stabilization of the electricity market, protection of the vested rights of distribution companies who concurrently carry on the electricity sales business being split up from KEPCO, and the resolution of regional variation in tariffs following from the divestiture of distribution, it appears that there was a need to put in place a period of restriction on electricity sales business licensing.¹⁷

However, other than the above Addenda to the Electric Utility Act and the Enforcement Decree, the effectiveness of which has expired, no provision exists at present to guarantee KEPCO's monopoly on sales. Under the Electric Utility Act, the period of restriction on electricity sales

15. Article 3 of the Addenda to Act No. 6283, the Electric Utility Act, and Article 3 of the Addenda to the Enforcement Decree of the same Act, Presidential Decree No. 17137

Addenda to the Electric Utility Act (Act No. 6283, December 23, 2000)

Article 3 (Restriction on Issuance of License for Electric Sales Business) The Minister of Commerce, Industry and Energy shall not issue licenses for the electric sales business as prescribed in Article 7 (1) until the date determined by Presidential Decree within a period of ten years from the date of the enforcement of this Act.

Addenda to the Enforcement Decree of the Electric Utility Act (Presidential Decree No. 17137, February 24, 2001)

Article 3 (Restriction on Licensing for Electric Sales Business) "Date determined by Presidential Decree" in Article 3 of the Addenda to the Act means the third anniversary of the enforcement date of this Decree.

16. Hak-Bong Sim (the then official at the Ministry of Commerce, Industry and Energy who was in charge of restructuring the electric power industry), 『Restructuring Korean Electric Power Industry and Interpretation of Statute』, 2001, page 314

17. Footnote No. 11, aforementioned book by Hak-Bong Sim, page 314

business licensing was to be within ten years and in the Addenda to the Enforcement Decree of the Act this was prescribed to end on the third anniversary of the date of the Decree’s entry into force. The government could have extended this period of restriction on licensing by amending the Enforcement Decree, but after suspending the restructuring, it did not separately amend the Enforcement Decree. Furthermore, as the ten-year period prescribed by the Electric Utility Act has lapsed, the effectiveness of the Addenda has expired. Therefore, on and from February 25, 2004, following the expiry of period of validity of Article 3 of the Addenda to each of the above Electric Utility Act and its Enforcement Decree, anyone who obtains a license by meeting certain requirements is able to carry on an electricity sales business. With electricity sales business licensing being permitted in this way, it was even the case that in 2016 an amendment was proposed in the 20th National Assembly to expressly provide for KEPCO to be the sole electricity sales company, in opposition to the opening of the electricity market pushed forth by the Park Geun-Hye administration.¹⁸

18. Bill for partial amendment of the Electric Utility Act proposed by a member of National Assembly, Hoon Lee, as the primary sponsor (proposed on July 4, 2016, Bill No. 2000642)

Article 7 (Licensing of Business) (1) A person who intends to carry on an electric utility business shall obtain a license, based on type of electric utility business, from the Minister of Trade, Industry and Energy; provided that, in the case of electricity sales business, this shall be limited to Korea Electric Power Corporation.

2) Electricity Sales Business Licensing Process under the Electric Utility Act and its Problems

The Electric Utility Act currently in force provides for electric utility businesses to be licensed by dividing it into categories consisting of power generation, transmission, distribution, sales and district electric utility.¹⁹

For the licensing of an electric utility business, the Electric Utility Act requires the following two conditions to be met: “① To have the financial and technical means necessary to operate the electric utility business in an optimal manner; and ② To be able to perform the electric utility business as planned.”²⁰ Furthermore, the above requirements are fleshed out a little further in the Enforcement Rules but that is where matters end.²¹ However, in relation to a

19. Article 7 (1) and Article 2 of the Electric Utility Act

Article 7 (Electric Utility Licenses) (1) A person who intends to operate the electric utility business shall obtain a license based upon type of electric utility business from the Minister of Trade, Industry and Energy. The same shall also apply to any modification of important matters prescribed by Ordinance of the Ministry of Trade, Industry and Energy.

Article 7 (5) 1 and 2 of the Electric Utility Act

20. **Article 7 (Electric Utility Licenses)** (5) The criteria for issuing an electric utility license shall be as follows:

1. To have the financial and technological means necessary to operate the electric utility business in an optimal manner;
2. To be able to perform the electric utility business as planned
3. In cases of electric distribution business or district electric business, to ensure that business zones for at least two electric distribution business entities or particular supply districts for at least two district electric business entities, shall not fully or partially overlap each other;
5. To meet the standards prescribed by Presidential Decree as necessary in the public interest.

(6) Detailed criteria and procedures for issuing a license under paragraph (1) and other necessary matters therefor shall be determined by Ordinance of the Ministry of Trade, Industry and Energy.

21. Enforcement Rules of the Electric Utility Act

Article 7 (Licensing Examination Criteria) (1) The criteria for examination of financial strength under Article 7 (5) 1 of the Act shall be as follows:

1. The sum required and financing plan in subparagraph 1 (j) of Attached Table 1 are specific and capable of realization
2. Credit evaluation under subparagraph 1 (a) of Attached Table 1-2 is satisfactory

(2) The criteria for examination of technical ability under Article 7 (5) 1 of the Act shall be as follows:

1. The plan for construction of electric facilities and the plan for its operation under subparagraph 1 (d) and (e), respectively, of Attached Table 1 are detailed and capable of realization

2. A plan for procuring technical personnel capable of constructing and operating the electric facilities under subparagraph 1 is presented in detail

(3) The criteria for examining whether an electric utility business is capable of being carried on as planned under Article 7 (5) 2 of the Act shall be as follows:

1. There is a high level of consumption in the designated area for the construction of electric facilities
2. The plans in subparagraph 1 (f) to (i) of Attached Table 1 are detailed and capable of realization

power generation business there is a separate public notice of the Ministry of Trade, Industry and Energy in addition to the above, which prescribes the detailed licensing criteria²², and regional restrictions apply as additional requirements in relation to a district electric business and a distribution business.²³ In contrast, for an electricity sales business there is no public notice containing separate requirements or detailed criteria applicable only to the licensing of an electricity sales business, other than the two general requirements above which apply to all electric utility businesses.

Therefore, in the case of an electricity sales business, anyone who prepares the following nine documents in addition to a business plan and, in the case of a company, its articles of associations, balance sheet and income statement, together with a shareholder register, may apply for a license:²⁴ ① a statement of opinion on the applicant’s credit evaluation; ② documentary evidence regarding the financing plan; ③ a plan for construction of electric facilities which includes a detailed schedule for major processes and a plan regarding construction personnel; ④ a plan for operation of electric facilities including a plan for procuring technical personnel; ⑤ a transmission relationship chart; ⑥ documentary evidence regarding a plan for site procurement and layout; ⑦ the applicant’s previous record of completing the construction of power generation facilities or giving up on or delaying the same, and operating results; ⑧ an annual business profit and loss forecast for the period of five years starting from the scheduled commencement date of business; and ⑨ a supply plan by year and use for the period of five years starting from the scheduled commencement date of business. The above documentation can be categorized according to requirement as shown in Table 2 below.

22. 「Public Notice Regarding Detailed Criteria for Power Generation Business Licensing, Electricity Tariff Calculation Standards, Permissible Margin of Error for Electric Meters and Work on Operation of Electric Power Systems」

23. Footnote 21 above, Article 7 (5) 3 of the Electric Utility Act

24. Article 4 (1) of the Enforcement Rules of the Electric Utility Act

[Table 2] List of Documents Required for Electricity Sales Business License

Category	Required Documents
Basic Requirements	<ul style="list-style-type: none"> - Business plan (attaching the following nine documents) - Articles of association, balance sheet and income statement (only applicable where the applicant is a corporation and, in the case of a corporation that is in the process of incorporation, only the articles of association shall be submitted) - Shareholder register (an applicant whose power generation facilities have capacity of 3,000 kW or less shall be excluded). In the case of a newly incorporated company, the applicant's largest shareholder shall be deemed to be the applicant.
1. Regarding financial strength	<ul style="list-style-type: none"> ① Statement of opinion on the applicant's credit evaluation (an assessment of trustworthiness in transactions by a credit information company pursuant to subparagraph 4, Article 2 of the "Use and Protection of Credit Information Act"); provided that, where the applicant is a newly incorporated company whose financial strength cannot be assessed, the applicant's largest shareholder shall be deemed to be the applicant. ② Documentary evidence regarding the financing plan
2. Regarding technical ability	<ul style="list-style-type: none"> Documentary evidence regarding plans for construction and operation of electric facilities ③ Plan for construction of electric facilities (including a detailed schedule for major processes and a plan regarding construction personnel) ④ Plan for operation of electric facilities (including a plan for procuring technical personnel)
3. Regarding capability to perform business in accordance with the plan	<ul style="list-style-type: none"> ⑤ Transmission relationship chart ⑥ Documentary evidence regarding a plan for site procurement and layout ⑦ The applicant's previous record of completing the construction of power generation facilities or giving up on or delaying the same, and operating results ⑧ Annual business profit and loss forecast for the period of five years starting from the scheduled commencement date of business
4. Regarding other matters	<ul style="list-style-type: none"> ⑨ Supply plan by year and use for the period of five years starting from the scheduled commencement date of business

However, even if an application were to be made for an electricity sales business license by satisfying all of the above requirements, not everyone can obtain an electricity sales license. Under the Electric Utility Act currently in force, the final decision on an electric utility business license is made by the Minister of Trade, Industry and Energy after a deliberation of the Electricity Regulatory Commission. However, because no precedent exists for the licensing of an electricity sales business or for the interpretation of the nature of electricity sales business licensing, it is

difficult in the current state to predict whether the Minister of Trade, Industry and Energy would issue a license.²⁵

What is more, there are no detailed criteria in relation to electricity sales business licensing. Article 7 (4) of the Enforcement Rules of the Electric Utility Act delegates the making of detailed examination criteria to the Ministry of Trade, Industry and Energy in the form of a public notice.²⁶ However, the 「Public Notice Regarding Detailed Criteria for Power Generation Business Licensing, Electricity Tariff Calculation Standards, Permissible Margin of Error for Electric Meters and Work on Operation of Electric Power Systems」 issued by the Ministry of Trade, Industry and Energy exercising the delegation, only prescribes the criteria regarding power generation businesses and does not provide for criteria applicable to other businesses such as an electricity sales business. Such a gap in the legislation may become a factor which makes it difficult for a prospective business applicant to apply for a license.²⁷

25. On the nature of electricity sales business licensing, there are discussions as to whether it is an ‘act of discretion,’ which in academia constitutes a license (teuk-heo); an ‘act prescribed by law,’ which in academia constitutes a permission; or an ‘act of prescriptive discretion,’ which is an act that falls between the two, but there is no interpretation by a court in the form of judicial precedent.

26. Article 7 (4) of the Enforcement Rules of the Electric Utility Act

Article 7 (Licensing Examination Criteria) (4) The Minister of Trade, Industry and Energy shall determine a set of detailed criteria pursuant to the provisions of paragraphs 1 to 3 and issue a public notice.

27. ZDNet Korea article dated March 8, 2017, "KEPCO Retail Monopoly Must Be Dissolved to Boost New and Renewable Energy" https://m.zdnet.co.kr/news_view.asp?article_id=20170308113239#imadnews#_enliple

“According to the Electric Utility Act currently in force, retail business is impossible due to lack of detailed legislative provisions on electricity sales business licensing”

3) Sub-conclusion

So far, we have considered the point that even though the restructuring of the electric power industry was suspended midway through implementation, this does not mean that electricity sales business licensing in the electricity market is impossible under the Electric Utility Act currently in force, nor that KEPCO's monopoly on sales is expressly provided for in statutes. In other words, at present the electricity sales market is already open as a matter of law.

However, with no precedent of the licensing of an electricity sales business nor detailed criteria on licensing, it would be difficult to predict whether a license could be obtained. Therefore, in order to rejuvenate the rigid electricity sales market by introducing competition in the retail electricity market, it seems that measures would be needed, such as an amendment of the

「Public Notice Regarding Detailed Criteria for Power Generation Business Licensing, Electricity Tariff Calculation Standards, Permissible Margin of Error for Electric Meters and Work on Operation of Electric Power Systems」, which currently only prescribes the detailed criteria for power generation businesses, to add provisions relating to electricity sales businesses.²⁸

²⁸. Although not additionally covered here, note that if two or more electricity sales companies were to come into existence following an opening of the electricity sales market, the bidding system currently in force, in which the Power Exchange predicts the level of demand, would also need to be modified. However, as this is currently prescribed at the level of the 「Rules on Operation of the Electric Power Market」, it seems that this would not extend so far as to require a statutory amendment.

2. Problems with the Wholesale Electricity Market - Principle of Compulsory Trading on the Electricity Market

**CHECK
POINT**

Under the Electric Utility Act, only KEPCO may carry on the electricity sales business in a monopolistic manner.

VS

The Electric Utility Act does not grant a monopoly status to KEPCO.

In the Korean electricity market, power generation companies and electricity sales companies must trade electricity only through the Korea Power Exchange and are punished if they trade electricity without going through the Exchange. This is referred to as the so-called principle of compulsory trading on the electricity market. The principle of compulsory trading on the electricity market is an unreasonable system which regulates the power generation market, as the wholesale electricity market, and carries a possibility of infringing on the fundamental rights of power generation companies and consumers under the Constitution.

1) Background to the Introduction of the Principle of Compulsory Trading on the Electricity Market and Its Implications

The principle of compulsory trading on the electricity market was first included in the Electric Utility Act in 2001 as part of the restructuring of the electric power industry which introduced competition in the power generation sector. According to the commentary on the statute by the Ministry of Government Legislation at the time of the amendment, the intention behind the introduction of the principle of compulsory trading on the electricity market was to promote early settlement and stabilization of the electricity market, by requiring electricity trading to be carried out in the compulsory electricity market.²⁹ Accordingly, in the Basic Plan for Restructuring

²⁹.Ministry of Government Legislation, Commentary on the Electric Utility Act – With Focus on Electric Power Restructuring, 2001, page 133

the Electric Power Industry it was planned that, although a compulsory pool system would be maintained for a certain period of time to allow the electricity market to settle, a voluntary pool system would be the ultimate aim.³⁰

Likewise, the National Assembly's committee report on the proposed amendment of the Electric Utility Act at the time also emphasized that "considering that the market and the pricing structure have yet to become settled in our country, every effort should be made, through the compulsory electricity market, to ensure that both the electricity market and the pricing structure become settled and the electric power system operates in a stable manner; in the long term, however, the scope of direct electricity trading should be widened gradually to strengthen the protection of consumer choice regarding the supply and price of electricity."

In the current electricity market, wholesale electricity trading between the power generation company and the electricity sales company may take place only on the electricity market established by the Korea Power Exchange (hereinafter, the market established by the Korea Power Exchange shall be referred to as the "compulsory electricity market"³¹)³². Although large-scale consumers may purchase electricity directly from the power generation market, i.e., the wholesale market, without going through an electricity sales company, such trading is possible

30. Ministry of Commerce, Industry and Energy, 『Reference Materials for Restructuring of Electric Power Industry』, February 1999, pages 80~81

31. Although under the Electric Utility Act, the 'electricity market' refers to the market established by the Korea Power Exchange for electricity trading (subparagraph 13 of Article 2 of the Electric Utility Act), since, generally speaking, a market in which wholesale and retail market prices of electricity are set is referred to as an 'electricity market,' in order to distinguish between the two terms the electricity market established by the Korea Power Exchange will be referred to as the 'compulsory electricity market.'

32. Article 31 (1) of the Electric Utility Act and subparagraph 13 of Article 2 of the Electric Utility Act
Electric Utility Act

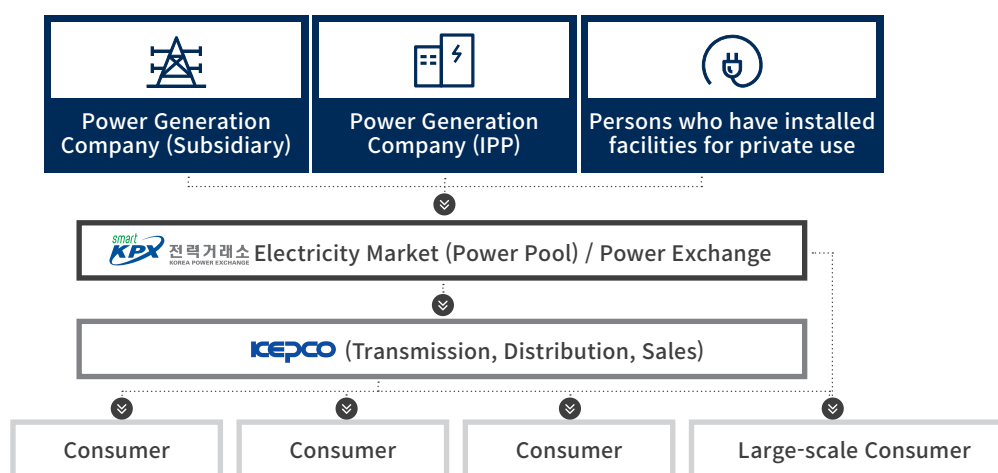
Article 31 (Electricity Trading) (1) An electricity generation business entity and an electric sales business entity shall engage in electricity trading in the electricity market, pursuant to the rules on operating the electricity market referred to in Article 43: Provided, That this shall not apply to cases prescribed by Presidential Decree, including islands.

Article 2 (Definitions) The terms used in this Act are defined as follows:

13. The term "electricity market" means a market to be opened by the Korea Power Exchange established under Article 35 for electricity trading (hereinafter referred to as the "Korea Power Exchange")

only through the compulsory electricity market.³³ In the event an electric utility business entity trades electricity outside the compulsory electricity market, it could be punished by imprisonment for a period not exceeding three years or by a fine not exceeding KRW 30 million.³⁴

[Figure 3] Structure of Korean Electricity Market



33. Article 32 of the Electric Utility Act and Article 20 of the Enforcement Decree of the Electric Utility Act

Electric Utility Act

Article 32 (Direct Purchase of Electricity) No electricity consumer may purchase electricity directly from the electricity market: Provided, That this shall not apply to a consumer who uses a volume exceeding that prescribed by Presidential Decree.

Enforcement Decree of the Electric Utility Act

Article 20 (Direct Purchase of Electricity) “Consumer who uses a volume exceeding that prescribed by Presidential Decree” in the proviso to Article 32 of the Act means an electricity consumer whose passive equipment has a capacity at least 30,000 kilovolt-amperes.

In practice, to make a direct purchase customers must join the Power Exchange as a member (Article 3.2.2.1 of the Rules on Operation of the Electricity Market), obtain an approval from the Power Exchange in respect of the direct purchase (Article 3.2.2.3), and provide a financial guarantee (Article 3.4.1). Furthermore, the price for the volume of electricity, which, in turn, determines the electricity purchase price, is set at the system marginal price (Article 3.2.1.1). Due to problems such as various procedural constraints, burden of fluctuations in the system marginal price, and tariffs which are no different from retail tariffs, the reality is that no direct purchaser exists at present (confirmed with the Ministry of Trade, Industry and Energy on the phone).

34. Electric Utility Act

Article 101 (Penalty Provisions) Any of the following persons shall be punished by imprisonment with labor for not more than three years or by a fine not exceeding 30 million won.

5. A person who engages in electricity trading at a place other than the electricity market, in violation of Article 31 (1) and (2) or 32

[BOX 1] Instances Where Electricity Trading is Possible Outside the Compulsory Electricity Market

1. Island areas not connected to the electric power system operated by the Power Exchange³⁵
2. Electricity not exceeding 1,000kW generated from new and renewable energy sources³⁶
3. A private power generation company who had already entered into a power purchase agreement with KEPCO prior to the amendment of the Electric Utility Act in 2000³⁷
4. In the case of an operator of district electric business and a person who has installed electric facilities for private use, trading through the Power Exchange is permitted selectively subject to certain requirements being met.³⁸ Under the Electric Utility Act, exceptions apply so that these persons may trade directly with KEPCO without going through the electricity market, but the share of such trading in the entire electricity market is very small, at 2%.³⁹

35. Latter part of Article 31 of the Electric Utility Act and Article 19 (1) 1 of the Enforcement Decree of the Electric Utility Act
Electric Utility Act

Article 31 (Electricity Trading) (1) An electricity generation business entity and an electric sales business entity shall engage in electricity trading in the electricity market, pursuant to the rules on operating the electricity market referred to in Article 43: Provided, That this shall not apply to cases prescribed by Presidential Decree, including islands.

Enforcement Decree of the Electric Utility Act

Article 19 (Electricity Trading) (1) “Cases prescribed by Presidential Decree, including islands” in the proviso to Article 31 (1) of the Act means the following:

1. Where electricity is traded in islands not connected to the electric power system operated by the Korea Power Exchange

36. Article 19 (1) 2 of the Enforcement Decree of the Electric Utility Act

Article 19 (Electricity Trading) 2. Where an entity engaged in new and renewable power generation business, as defined in subparagraph 5 of Article 2 of the Act on the Promotion of the Development, Use and Diffusion of New and Renewable Energy, trades electricity produced by the business entity by using an electric power generating installation with a capacity not exceeding 1,000 kilowatts.

However, as of July 14, 2020 the Ministry of Trade, Industry and Energy has made an announcement in advance of its plan for an amendment of the Enforcement Decree, detailing that the amendment would also allow renewable energy generation companies producing at least 1MW or more to sell electricity through direct contracts with an operator of electric sales business without going through the electricity market (Public Notice No. 2020-431 of the Ministry of Trade, Industry and Energy).

37. Article 8 of the Addenda to Act No. 6283, the Electric Utility Act

Article 8 (Transitional Measures Concerning Contracts of Supply and Demand) (1) A person who made a contract of supply and demand provided in Article 20 (1) of the previous Act with a general electricity business entity licensed under the previous Act as at the time this Act enters into force may, notwithstanding the amended provisions of Article 31 (1) and (2), supply electricity to a person deemed to be an electric sales business entity under Article 2 of the Addenda in compliance with the same contract of supply and demand.

38. Article 31 (2) and (3) of the Electric Utility Act

Article 31 (Electricity Trading) (2) No person that has established electric installations for private use shall trade any electricity he or she produces in the electricity market: Provided, That this shall not apply to cases prescribed by Presidential Decree.

(3) Where there is a shortage or surplus of electricity in a particular supply district, the relevant district electric business entity may trade such amount of shortage or surplus in the electricity market, as prescribed by Presidential Decree.

39. Korea Electric Power Corporation, Korea Electric Power Statistics (No. 89)

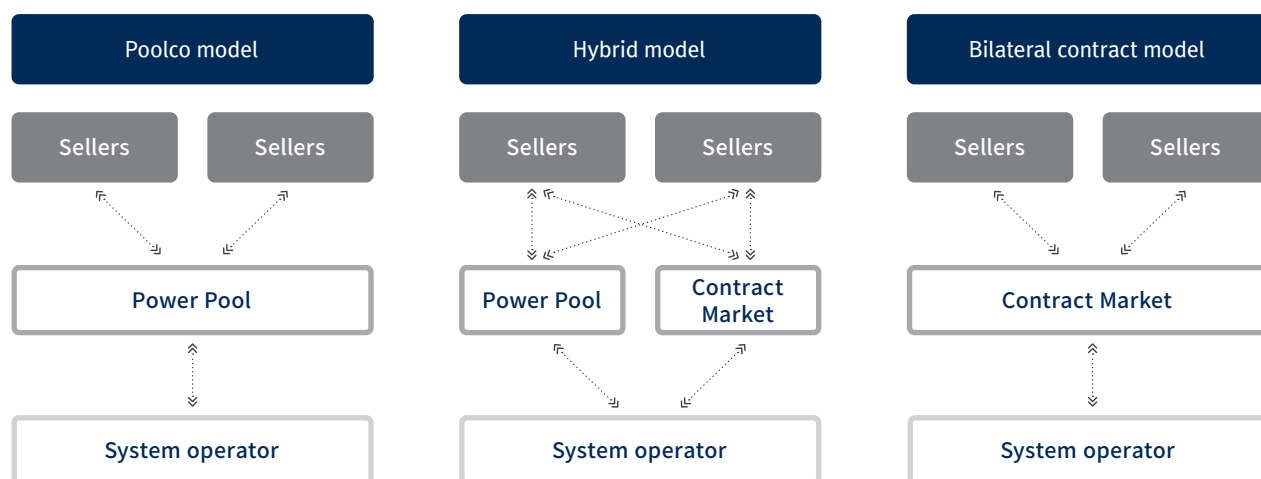
2) Characteristics of and Problems with the Compulsory Electricity Market

[Table 3] Form and Type of Power Pool

Classification	Whether Applicable	Type
Existence of power pool	X	No pool
Trading outside power pool permitted	O	Voluntary pool
	X	Compulsory pool

Trading of electricity can be compared with the trading of shares. An approach which requires shares of all stock companies to be listed on the Korea Exchange and forces all trades to be carried out through the Korea Exchange can be likened to a compulsory pool, while an approach which allows stock companies to choose whether or not to list their shares on the Korea Exchange and, even in cases of listed companies, permits over-the-counter trades outside the Korea Exchange can be likened to a voluntary pool. On the other hand, a case where the Korea Exchange does not exist can be comparable to no pool. In other words, forcing electricity to be traded only on the compulsory electricity market is referred to as a compulsory pool. By adopting and maintaining a compulsory pool, Korea runs counter to the trend overseas in which many countries have adopted a voluntary pool or no pool.

[Figure 4] Structure of Korean Electricity Market



The compulsory electricity market established and operated by the Korea Power Exchange is a spot market on which trades are made on an hourly basis one day in advance. An electricity price determined on the basis of bidding is applied equally to all successful bidders. In contrast, under a voluntary pool regime, where over-the-counter trades are possible, power generation companies may predict the price by entering into contracts with electricity sales companies or large-scale electricity consumers on the terms they have determined for themselves, and may achieve greater stability by entering into long-term contracts. This means that, unlike in a spot market, investment risk may be hedged more easily.⁴⁰ Furthermore, as bilateral contracts between electric utility companies also perform a positive role of promoting competition in the electricity market as a whole, they can lower the price of electricity in an effective manner.⁴¹

However, in the case of Korea, under a compulsory electricity market system, power generation companies have no choice but to accept electricity costs determined by the Cost Evaluation Committee of the Korea Power Exchange based on variable costs (CBP). As there is no freedom of contract, the result is a structure where power generation companies are unable to trade via contracts - a method that is stable and predictable - and must bear in full the risks flowing from the fluctuation of electricity trading prices.⁴² Inevitably, therefore, under the current regime, the expansion of new energy businesses, such as renewable energy, distributed energy and small generation aggregator businesses, is slow. This is because in a new energy business, long-term trades based on the anticipation of favorable prices in the long term are more advantageous in terms of financing or contract conclusion; such trades are, however, impossible. In contrast,

40. In a spot market, there is a risk that power generation companies may need to enter into fuel purchase agreements when they are unable to predict the electricity sale price, while sales companies may need to enter into sales contracts with consumers not knowing how much the electricity purchase price would be. If the cost of fuel purchase is higher than the electricity sale price (wholesale price), power generation companies would incur a loss, and if the electricity purchase price is higher than the sale price (retail price), sales companies would incur a loss.

41. Chang-Hyun Cho, *Restructuring and Privatization of Electric Power Industry*, Korea Institute for Industrial Economics & Trade, 2002, pages 8–9

42. CNews article dated September 10, 2018, “〈Monday Feature〉 KEPCO Sale Price at KRW 82 with KRW 80–90 Just Being Cost of Fuel ‘Tail Wagging the Dog’” http://www.cnews.co.kr/m_home/view.jsp?idxno=201809071114543340445, “According to the Korea Power Exchange, the SMP, which was an average of KRW 160.83 per kWh, fell by half to KRW 81.77 last year. In 2016, it was even lower, at KRW 77.06. Considering that the fuel costs of LNG are between KRW 80–90 kWh, it means that it cannot even pay for the fuel costs, let alone maintenance and labor costs.”

the power generation subsidiaries of KEPCO, which has a monopoly on electricity sales, are maintaining steady revenues in accordance with the tariff settlement framework (principle of comprehensive cost compensation and settlement adjustment coefficient) which they have designed. In addition, in a compulsory electricity market, not even a large-scale electricity consumer who wishes to purchase electricity in a stable manner by adjusting the unit price of wholesale transactions through a long-term contract has an opportunity to enter into a bilateral contract directly with a power generation company.

3) Constitutionality of Principle of Compulsory Trading on the Electricity Market

(1) Likelihood of Infringement on Consumer Right to Self-Determination

While world-leading corporations such as Apple, Google and BMW have declared that they would only use electricity produced with renewable energy (RE100 Initiative), in the case of Korea, since corporations are unable to purchase electricity produced with renewable energy due to the principle of compulsory trading on the electricity market, the issue of guaranteeing large-scale consumers’ ‘right to self-determination’ with regards to their consumption of green electricity has come to the fore. This is because large-scale consumers are unable to trade specifying only electricity produced from renewable energy such as solar power or wind, which is in turn due to the fact that they must, even if they wish to make a direct purchase, trade on the compulsory electricity market.⁴³

⁴³. RE100 is a global campaign led by the private sector which aims to meet corporate power consumption with 100% renewable energy. World-leading corporations such as Google, BMW, Apple, Nike and Starbucks participate and, as of May 2020, a total of 235 corporations are members. However, there are no domestic member corporations to date. A cheap retail tariff which does not properly reflect the wholesale electricity price, together with the principle of compulsory trading on the electricity market, pursuant to which corporate electricity consumers are unable to purchase electricity by selecting a specific generator themselves, have been pointed out as causes (Seung-yong Park, “[Current Affairs Insight] An Era where Rejection of Renewable Energy Makes ‘Corporate Survival’ Impossible – RE100 (100% Renewables), Rapid Emergence as the ‘New Normal’ in Global Trade, dated December 2018, https://www.yeosijae.org/posts/556?project_id=15&topic_id=3, “In Korea, electricity is purchased only through KEPCO, and it is impossible to prove that the used electricity was supplied from renewable energy. There is no channel for private consumers to select and directly purchase renewable energy.”).

In order to introduce so-called third-party PPAs, which are power purchase agreements under which KEPCO, as the current sales company, is the intermediary, the Ministry of Trade, Industry and Energy has made a prior announcement in respect of an amendment of the Enforcement Decree of the Electric Utility Act (Public Notice No. 2020-431 of the Ministry of Trade, Industry and Energy), as noted in footnote 38.

The principle of compulsory trading on the electricity market in Article 32 of the Electric Utility Act poses a constraint on large-scale electricity consumers' ability to purchase power freely on the wholesale electricity market from the generator of their choice at the price and in accordance with the method they have chosen. For this reason, it is possible that the principle may infringe on electricity consumers' right to self-determination, which is a right - derived from the right to the pursuit of happiness under Article 10 of the Constitution - to choose a product of their own free will.⁴⁴

[BOX 2] Case on Constitutionality of Alcoholic Beverage Purchase Order System Relating to Consumer Right to Self-Determination

Constitutional Court Decision 96HeonGa18 decided December 26, 1996 [Request for Ruling on Constitutionality of Article 38-7, etc. of the Liquor Tax Act]

The Constitutional Court has ruled that a local Do-produced soju purchase order system under the Liquor Tax Act, which imposes an obligation on soju dealers to purchase at least 50% of soju produced within its local province, Do, was unconstitutional on the grounds that, because such a system cannot be considered as a suitable means to achieve the legislative purpose such as regulation of monopolies and oligopolies, fostering of regional economies and protection of small and medium enterprises, it constitutes an "unconstitutional provision which infringes to an excessive extent not only soju dealers' freedom of occupation but also soju producers' freedom of competition and corporate freedom - in other words their freedom of occupation - and the right to self-determination derived from consumers' right to the pursuit of happiness." The Court has also ruled that "although the local Do-produced soju purchase order system only imposes a purchase obligation on soju dealers in direct terms, in practice, by suppressing holdings of market share through capability-based competition, the purchase order system restricts soju producers' 'corporate freedom' and 'freedom of competition,' and, by restraining consumers from choosing a product of their own free will, the system also infringes on the 'right to self-determination' derived from consumers' right to the pursuit of happiness."

44. Right to self-determination under the Constitution refers to an individual's right to make decisions on certain private matters for himself or herself without any interference from the state. Right to self-determination is based upon human dignity. This is because, through the protection and the exercise of freedom of self-determination, individual personality that is full of character may be expected to develop. In particular, in modern society that leans toward the welfare state, as enlarged administrative power comes to be involved in almost every aspect of citizens' lives and the tendency to restrict the individual's freedom in favor of uniform treatment for administrative convenience or efficiency becomes stronger, self-determination takes on a doubly important meaning in modern society (Hoi-Chul Jung, *Fundamental Course on the Constitution*, 5th Revised Edition, 2010, page 295). The Constitutional Court considers "the consumers' right to self-determination, which is the right to freely choose the counterparty to a transaction, the place of purchase, price, and transaction conditions in the purchase and use of goods and services", as a fundamental right, and protects it as such.

(2) Likelihood of Infringement on Business Entities’ Freedom of Contract and Business Freedom

The principle of compulsory trading on the electricity market restricts power generation companies’ freedom to decide on essential matters such as the price, method and options for themselves, and enter into contracts with a diverse range of electricity sales companies or large-scale electricity consumers. Added to this, as participation in the compulsory electricity market generates unnecessary expenses (Power Exchange membership fees, settlement expenses, etc.), there is also a possibility of an infringement on such companies’ business freedom.⁴⁵

(3) Whether Consumers’ and Power Generation Companies’ Fundamental Rights are Infringed

Then, is the principle of compulsory trading on the electricity market an unconstitutional system that goes beyond the level of restricting consumers’ right to self-determination and the business freedom of power generation companies and electricity sales companies, and infringes on such right and freedom?⁴⁶ Constitutionality of the principle of compulsory trading on the electricity market can be reviewed in accordance with the Constitutional Court’s criteria, as set out in Table 4 below.

⁴⁵. Business freedom (freedom to carry on occupation) refers to the freedom to form social and economic living relationships while carrying on an occupation of one’s choosing. Such a freedom includes matters such as the place, time period, form and means of occupational activities, as well as the determination of their scope and content. It naturally follows that freedom of competition, as an outcome of the actual exercise of freedom of occupation by the holder of fundamental rights, is also protected by the freedom of occupation; such a freedom means the freedom to engage in corporate activities, as regards competition with other corporations, without any interference or obstruction by the state.

⁴⁶. Our Constitution provides that, when necessary for national security, the maintenance of order, or public welfare, fundamental rights of citizens may be restricted by statute (Article 37 (2) of the Constitution). Therefore, fundamental rights are not given absolute protection at all times, and where the state’s restriction of citizens’ fundamental rights goes beyond a certain level to become excessive, it becomes an infringement of fundamental rights and is unconstitutional. Whether a restriction on fundamental rights is excessive is examined in accordance with the principle of proportionality from four aspects, namely legitimacy of purpose, suitability of means, minimal infringement and balance of legal interests. A restriction on fundamental rights of citizens which fails to satisfy any one of these principles becomes an infringement of fundamental rights.

Constitution of the Republic of Korea

Article 37 (2) The freedoms and rights of citizens may be restricted by Act only when necessary for national security, the maintenance of law and order or for public welfare. Even when such restriction is imposed, no essential aspect of the freedom or right shall be violated.

[Table 4] Review of Principle of Compulsory Trading on the Electricity Market in Accordance with the Principle of Proportionality

Criteria for Judging Constitutionality	Contents
Legitimacy of purpose	<ul style="list-style-type: none"> - The principle of compulsory trading on the electricity market, by requiring all wholesale electricity trading to be conducted in one place, was introduced with the objective of boosting trading, providing oversight of unfair trading, etc., and stabilizing wholesale power prices. - However, according to the commentary on the statute of the Ministry of Government Legislation, the objective was to adopt the principle of compulsory trading on the electricity market on a temporary basis until the power generation market stabilized. - The power generation market has already been in operation for nearly 20 years and is a mature and settled market with 4,000 business entities. - The principle of compulsory trading on the electricity market, since it has already achieved the purpose behind its introduction, namely the settlement and stabilization of the power generation market, has lost its legitimacy of purpose.
Appropriateness of measure	<ul style="list-style-type: none"> - The principle of compulsory trading on the electricity market only served to standardize wholesale electricity prices, which meant that business entities are unable to avoid the risk of price fluctuations nor conclude diverse forms of transactions. - In circumstances where the power generation market has become settled and stabilized, the principle of compulsory trading on the electricity market is no longer an appropriate measure for regulating wholesale electricity trading and prices.
Minimality of infringement	<ul style="list-style-type: none"> - Since the aim of stabilizing wholesale electricity prices can be achieved through regulation of retail electricity tariffs, such as the electricity tariff authorization system of the Ministry of Trade, Industry and Energy under the Price Stabilization Act and the Electric Utility Act, rather than through the principle of compulsory trading on the electricity market, there is no need to go so far as to mandate trading methods to control wholesale electricity prices. - Unfair trading can be regulated by the Monopoly Regulation and Fair Trade Act. - The majority of countries are promoting competition in power generation markets while operating them in a stable manner by allowing over-the-counter trading. - The principle of compulsory trading on the electricity market exceeds the least intrusive means necessary to achieve the legislative purpose.
Balance of legal interests	<ul style="list-style-type: none"> - Public interest sought to be promoted: given that the power generation market has already matured, the need for the public interest in settling and stabilizing the power generation market has become considerably weaker. - Private interest being infringed: ① as new stakeholders in the electric power industry, such as renewable energy generation, demand response resources and energy prosumers have emerged, there is a heightened need for diverse forms of electricity trading, but consumers and business entities are unable to trade electricity by choosing one another and agreeing on terms freely (freedom of contract); ② consumers cannot consume ethically, nor make a purchase by selecting an inexpensive energy source (consumers' right to self-determination); and ③ electric utility companies cannot avoid the risk of price fluctuation arising from spot trading (business freedom). - In particular, since the freedom of contract is a broad principle in civil law, in order to restrict such a freedom there must be a sufficient level of necessity in the public interest. - The need for the public interest to be promoted is low and, even if the principle of compulsory trading on the electricity market were to be abolished, the likelihood of violating the public interest is slim; in comparison, the need to protect the private interest, a broad principle in civil law, is greater. For this reason, the balance of legal interests has also been lost.

For the reasons set out in Table 4 above, the possibility that subparagraph 13 of Article 2, the first part of Article 31 (1), and Article 32 of the Electric Utility Act, which prescribe the principle of compulsory trading on the electricity market, contravene the Constitution by infringing on consumers’ right to self-determination as well as electric utility companies’ business freedom and freedom of contract is significant.

4) Sub-conclusion

A voluntary pool system that permits free bilateral contracts is a flexible system which, by reducing the scope for price distortion in the power pool and bringing the price of the electricity market as a whole closer to a competitive pricing level, can increase both consumer welfare and efficiency of the electricity market. In contrast, the principle of compulsory trading on the electricity market that provides for a compulsory pool was a plan which, from its design stage, was to be operated on a temporary basis, and is likely to contravene the Constitution in that it infringes on consumers’ right to self-determination as well as electric utility companies’ business freedom and freedom of contract. Therefore, through an amendment of the Electric Utility Act, the principle of compulsory trading on the electricity market needs to be abolished and the use of free contracts needs to be expanded further.

IV. Recommendations

Following the suspension of restructuring part way through, Korea's electricity market has been in a provisional state for approximately 20 years and remains in globally unprecedented, abnormal conditions. A simple bidding regime such as the CBP market is still being maintained and, despite the power generation market already being open, settlement adjustment coefficients based on the principle of comprehensive cost compensation, which is a method of regulating a monopolistic market, are being applied to KEPCO's power generation subsidiaries. For these reasons, new energy businesses are failing to establish themselves properly in the market. Given that an advanced electricity market had already been conceived in the early 2000s, the unfinished plan should be completed before it is too late.

Although KEPCO has a de facto monopoly over the electricity sales market, the market is already open as a matter of law. But in the absence of detailed licensing criteria, it is not easy for businesses, who wish to obtain electricity sales licenses, to apply for a license. Accordingly, to enable other electricity sales companies to enter the market smoothly, detailed licensing criteria for electricity sales businesses need to be laid out via an amendment of the 「Public Notice Regarding Detailed Criteria for Power Generation Business Licensing, Electricity Tariff Calculation Standards, Permissible Margin of Error for Electric Meters and Work on Operation of Electric Power Systems」.

From its design stage, the principle of compulsory trading on the electricity market was planned to be operated on a temporary basis and the principle is highly likely to contravene the Constitution in that it infringes on consumers' right to self-determination and corporations' business freedom. In contrast, a voluntary pool system can, by reducing the scope for price distortion in the power pool and bringing the price of the electricity market as a whole closer to a competitive pricing level, can increase both consumer welfare and efficiency of the electricity market. Therefore, given that the plan had been to switch from a compulsory pool system to a voluntary pool in line with the maturing of the power generation market, the principle of compulsory trading on the electricity market should be abolished before it is too late by amending the Electric Utility Act, and the use of free contracts should be expanded further by

switching to a voluntary pool system.

Furthermore, if real competition were to be introduced in the electricity sales market, KEPCO's transmission and distribution divisions should be unbundled from the electricity sales division and, in order to lay the foundations for a fair market order, an independent regulatory authority needs to be founded. Solutions for Our Climate plans to cover this issue in detail at a later date through a separate report.

SFO°C

Solutions for Our Climate

Solutions for Our Climate (SFOC) is a Korea-based non-profit established in 2016 that advocates for stronger climate and air policies.

SFOC is led by legal, economic, financial, and environmental experts with experience in energy and climate policy and works closely with domestic and overseas nonprofit organizations.

