Abstract—Macropolicy regulation and microeconomic regulation of electricity regulatory power are disparate types of powers in legal principles. The former has the property of quasi-legislative power but the latter has the property of both executive power and quasi-judicial power, which determine that it is supposed to allocate the above-mentioned different powers to different regulators according to the principle of checks and balance. After state electricity regulatory commission (serc) was established, the allocation structure that the administration is separated from supervising decentralized out of place when allocating the core economy regulatory power like electricity pricing to policy regulators, which didn’t achieve the checks and balances; it radically abandons the allocation principles to repeal the current allocation structure of serc and allocate these two regulatory powers to the same regulator. Only relocating the policy and economy functions of electricity regulation in the light of independent regulation and energy regulation’s pattern can it establish a basis to make china get rid of the trouble that the electricity regulation is invalid.

Keywords—the electricity regulation; the power allocation; checks and balance; the separation of government and supervising

I. INTRODUCTION

Because the professional electricity regulators-serc lacks of economy regulatory powers like the market access and electricity pricing and so on, the Chinese government regulates the electricity industry which is always in an invalid predicament. In order to get rid of it, the state council replaced the state electricity regulatory committee and delegated its regulatory power to the new-established national energy board in the institutional reform in march of 2013; the state council announced “several opinions on better deepening the electricity structural reforms”; national development and reform commission and the national energy board issued some supportive documents of electricity structural reforms like “enforcement opinions on propelling electricity market construction” “enforcement opinions on electricity transaction institution’s establishment and standardized operation” and so on. Can these new reform initiatives make the national energy board get rid of the trouble that the state electricity regulatory committee was in before to achieve the effective regulation to the electricity industry? The author thinks the non-effective trouble of Chinese electricity regulation results from not clearing the basic legal problem how to rationally allocate different electricity regulatory powers. And these new reform initiatives haven’t rationally allocated the policy and economy regulatory powers of electricity regulations through legislation. On the basis of the above basic legal problem, this paper aims to investigate the back story and the shortcomings of the policy and economy powers’ allocation of Chinese electricity regulation and provide legislative optimum proposals for making china get rid of the non-effective trouble of electricity regulation.

II. THE RATIONALE OF THE POLICY AND THE ECONOMY POWERS’ ALLOCATION OF ELECTRICITY REGULATION

The compatibility of legal characteristic of electricity regulatory powers means that the powers include different properties of powers, the quasi-legislative power and the executive power and the quasi-judicial power. In the electricity regulatory powers, the quasi-legislative power is a macroscopic, indirect policy power, but the executive power is a microscopic and direct economy power or social power. The legal characteristic determines that to allocate the policy and economy powers of electricity regulation should follow the basic principle of checks and balance.

A. The legal characteristic of electricity regulatory powers

The appearance of regulatory state in the present century is the direct proof that the new power like government regulatory power has extensively existed in society and obtained great benefits from protecting extensive economy and social value, which requires to re-examine the finiteness of the traditional tracheotomy theory of national powers and deeply research the legal characteristic of the government regulatory powers. The root that the government regulatory powers independently exist in modern society is that it can effectively cope with the complex and realistic needs of the society than the traditional legislative power, the executive power and the judicial power, which is because it merges the legal characteristics of the traditional legislative power, the executive power and the judicial power.

At first, the government regulatory power inherits collectivity and initiative of the traditional executive power, whose powers include the quasi-legislative power, the executive power and the quasi-judicial power. For example, the typical government regulatory institution - American independent control committee has the power to make the
executive laws and make or execute standard legislative power, prosecute (administratively) and arbitrate (judicially) whether the objects of its jurisdiction violate the law or not. Even though the domestic academic circle has differences on the conclusion of the government regulatory powers [1], but has no dispute that the government regulatory powers set the quasi-legislative power, the executive power and the quasi-judicial power as a whole. The main part of the government regulatory powers has the power to positively and proactively perform its regulatory power that the law gives to it, and there is no need to follow the passive exercise principles of “no trial without complaint” like the traditional judicial power. In the modern society where increasingly the incomplete law cannot cope with the complex and realistic needs, the initiative and collectivity of the government regulatory powers make the government proactively set precautionary mechanism and effectively prevent the damage actions from happening, quickly and effectively punish the on-going damages, make up the shortcoming that the court action depending on case judgment cannot persistently maintain the market orders through the pre-determined rules and standards. Because of these, the government regulatory powers appear in the modern market economy society and become the replacement of the traditional, passive and univocal judicial power.

Besides, the government regulatory powers inherit the independence, speciality and depoliticization of the traditional judicial power, which has the quasi-judicial characteristic. It perform its regulatory power in the way that the law gives to it without any interference from the citizens, the legal persons and other organizations, which is the determiner that can effectively maintain the market order of fair competition and the public interest [2]. Facing the special matters or the special industry of economy industry, the complexity and polytrope in the process of the government regulatory powers as well as high technicality of regulatory matters determines the speciality of the government regulatory powers, which require the main part of performing the government regulatory powers higher than that of performing the traditional executive power. The supervisors of the government regulatory institutions like the judge are not selected by voters and not affected by political factors, only in charge of validity and scientificity of regulatory. The quasi-judicial characteristic of the government regulatory powers is the precondition to maintain the authority of the government regulatory institutions and the scientificity of regulatory means as well as the stability of regulatory policy.

The electricity regulatory is a kind of typical government regulatory power, having the legal characteristic which includes the traditional legislative power, the executive power and the judicial power. This legal characteristic determines that allocating the electricity regulatory power can’t use the same way as allocating the traditional executive power. It is a prevalent wrong concept that the electricity regulatory power equals to the traditional executive power in the electricity industry, which makes the system construction of Chinese existing electricity regulation be similar to that of the traditional executive power and which is the root that there are many existing unreasonable arrangements in the process of allocating the electricity regulatory powers.

B. The theory of checks and balance

As far as the legislation is concerned, now that the policy power and the economy power of the electricity regulatory have great differences like those differences existing among the traditional legislative power, the traditional executive power and the judicial power. Then, how is to allocate thee different regulatory functions reasonable? Is the centralized configuration or the decentralized allocation proper? The politics theory of checks and balances provides the evidence for the way to choose to decentralizedly allocate the policy and economic functions of the electricity regulations.

According to Montesquieu’s checks and balances, all the people who have power easily abuse power because of the hypothesis that the humans are basically evil. Only can balancing the power prevent the power from being abused. And using power to restrain power is the best way to stop the power from being abused. To use power to restrain power, it is a must to decentralizedly allocate power, and make them mutually independent and balanced. For this reason, Montesquieu mentioned the legislative power, the administrative power and the judicial power should be delegated to different main parts to perform rather than the same main part, otherwise, which will lead to autocracy. On the basis of this theory, Hamilton as well as other federalists mentioned the national power should be allocated to the legislative agency, the administrative agency and the judicial agency to prevent the power from being centralized to one person. The three institutions separately have their own independent power, the power to self-defense and restrict to resist other institutions’ torts so as to achieve the balance of interaction and interdependence among every agencies and prevent the power from being combined and centralized. The theory of checks and balances said by Montesquieu, Hamilton and other ideologists has become the basic principle of the modern social system, and has the instructive meaning for the modern countries to standard the public power of the electricity regulation.

The basic theory of checks and balances determines the policy and economic functions of the electricity regulation should be separately configured and these two functions’ institutions should be mutually independent and restricted. The compatibility of the electricity regulation means the electricity regulatory power is more centralized compared with other traditional and unitary legislative power, the judicial power and the administrative power; the initiative feature of the electricity regulatory power makes the electricity regulatory power more easily be operated and abused. Therefore, while allocating the electricity regulatory power. Only decentralization configuration, the mutually independent regulatory departments and arranging the balance mechanism of the electricity regulatory power can prevent the electricity regulators and other officers from abusing regulatory power to damage the social public interest, and the damage to the counterparts that the concentration of the electricity regulatory power causes can be avoided.
III. THE EVOLUTION OF THE PATTERNS OF THE POLICY AND ECONOMIC FUNCTIONS OF CHINA’S ELECTRICITY REGULATION

In 1997, on the basis of the ministry of electricity power industry, China established the state electric power company, and started to separate the government functions from enterprise management of the electricity industry. The government functions that the ministry of electricity power had was turned over to the state development planning commission and other departments[3]. The power these departments have are traditional administrative power instead of the modern government regulatory power. And there are no differences between the policy and economic functions of the electricity regulation. This concept to distinguish the policy and economic functions of the electricity regulation and separately allocate these two powers began in 2003 when the state electricity regulatory committee was set up, but changed in 2013 when it was repealed. So the patterns of the policy and economic functions of the electricity regulation are distinguished as two types of allocation patterns. One is during the time when the state electricity regulatory committee still survived; the other is during the time when it was abolished. Usually, the former is called the old allocation pattern, but the latter is the new allocation pattern.

The symbol that the old allocation pattern was set up is to establish an independent and professional regulatory agency—the state electricity regulatory committee in order to propel the market reform of the electric industry in accordance with “the electricity regulations”. To some extent, “the electricity regulations” embodies the concepts of distinguishing the policy and economic functions and allocating them to different regulators—separation of the government and supervision. “The provisions for the establishment of institutions and personnel in the main responsibilities of the national development and reform commission” gives the macropolicy functions and two microeconomic functions such as the electricity pricing and the electricity market access of the electricity industry to the national development and reform commission. However, “the provisions for the establishment of institutions and personnel in the main duties of the national electric power regulatory commission” gives the state electricity regulatory committee not only the economic functions (including making the market operational rules, regulating the market order and maintaining the fair competition, supervising the transmission of power supply and the non-competitive electricity generation business and so on) but also the social functions (for example, regulate the electricity enterprise to safely produce). However, this core economy regulatory functions of the electricity price regulation gives the state electricity regulatory committee only the function of putting forward the proposals on adjusting the electricity and supervising and checking the electricity pricing performance.

The institutional reform and the functional transformation that the state council issued in 2013 is the symbol of establishing the allocation pattern of new energy regulatory functions. This project established the new national energy board which is subordinate to the national development and reform commission and repealed the state electricity regulatory committee and the old national energy board. This combination made China’s energy regulatory system come to a big energy system, and formed new allocation patterns of the electricity regulatory functions. The national development and reform commission still has the economic regulatory functions for the electricity industry (the regulatory functions of the electricity price and the market access), the new energy board undertake the regulation and management functions that the state electricity regulatory committee and the old national energy board did for the electricity industry.

Therefore, the allocation pattern of the policy and economic functions of China’s electricity regulation is continuously evolutionary with constantly deepening of the market reform in electricity industry, and successively experienced the evolution from the non-divided government and supervision to the relative separation of government and supervision, and then to the evolution of the unity of government and supervision.

IV. THE SHORTCOMING OF THE POLICY AND ECONOMIC FUNCTIONS’ ALLOCATION OF THE ELECTRICITY REGULATION

The advanced market economy counties have many legislation in the field of electricity regulation, such as American “Federal power law”(1963) “Energy organization act”(1967), and British “electric power law”(1989) and so on. The legislative experience of these countries shows that setting up a regulatory agency through legislative form with legal rank and configuring its regulatory function, decentralizedly allocating the policy and the economy regulatory functions to the policy departments of the electric power supervision and the professional supervision institutions of the electric power through the separated pattern of the government and supervision are the basic method to avoid that the supervision institutions abuse the power and effectively achieve the goal of supervision. The legislative form and legislative content of Chinese electric power regulation’s power allocation still have many shortcomings, which result the Chinese government has been trapped in the invalid dilemma of power regulation. The academic community generally believes that the legal basis for the establishment of a professional power regulator is the fourth regulations of electric power regulation act, but the professional power regulatory agency determined by this article is not the electric supervision committee but the power regulator of the state council. The direct basis for determining the legal status of the professional power regulatory agency of the national electricity regulatory commission. Although the provision has a formal legal effect, its legal form is far lower than the law enacted by the national people’s congress. The legislative form of setting up a professional power regulatory agency and its supervisory function is far below the legal rank which it should have. After were repealed, in the manner given to the legal status of the state energy administration, it still inherited the usual practice that the state council issued on the national energy board’s “three decides” program but not in the way that the highest legislature enacted the law. The institutional basis for the power regulatory function of the new energy bureau is still not a law issued by the national people’s congress in form.
The current power law of China should be the legal basis of power regulation, because no professional electric power regulator has been set up, of course, it is impossible to configure the functions of the professional power regulator and the policy department. Because the law has been based on the planned economy and has determined the vertical integration, the power management system of the government enterprise, and the enterprise, and this management system is completely contrary to the modern power regulation system, not only does it fail to provide the institutional basis for the power supervision regulations issued after the electricity market reform, but also the relevant content is contrary to the foregoing of the regulation of electricity. The content of the electric power regulation which is contrary to the power law is based on the legal principle that the upper law is superior to the lower law, and the legal effect should not have the legal effect, but after the promulgation of the regulation on electricity, the configuration of the British power regulatory function has in fact been implementing the regulations. Such laws and regulations are contrary but in the state of effective and long-term coexistence, which undermines the unity of the rule of law.

A. The old configuration pattern can't achieve the goal of checks and balances by allocating the core economy supervision function to the policy department.

In spite of the establishment of a professional power regulator, the regulation of power regulation still does not make the power regulation of our country complete. The separation of government and supervision. Because the regulations do not define the professional power regulators and policy regulators, the core economy regulatory function that should be given to a professional institution is given to the policy department, which causes the policy departments of electric power regulation to undertake the economy supervision function of the core of the electric power regulation.

The regulation of power supervision is not clear on the positioning of the national development and reform commission, while allocating the functions to the national development and reform commission, it is based on policy function, but it also contains the core economic function. Because the position of the national development and reform commission is not only a policy department of electricity regulation, but also a professional regulatory agency. Influenced by the functions of the national electricity market of the ndrc and serc, “the power regulation rules” are forced to be fuzzed into “the power supervision and administrative law enforcement functions of the state council in accordance with the regulations and the relevant regulations of the state council”. That is why The national development and reform commission’s incorrect self-orientation has been able to exist for a long time and the core economic supervision functions such as electricity price and power market access, have been obtained by the legal basis. The electric supervision committee that should be given the legal status of a professional regulatory agency and undertake all the economic regulatory functions is only given part of the economic functions from the twelfth regulation to the nineteenth regulation in the electric power regulatory regulations and a large number of social functions, which makes the power supervision be positioned wagging between the elimination of monopoly and the guarantee of the safety of the power industry.

In the dispute that hinder the regulation of electricity regulation as soon as possible on the ownership of electricity price regulation, the state development and reform commission claims that the national macroeconomic management function should be enjoyed by the national macroeconomic management because the electricity price is concerned with the whole country’s macroeconomic operation. The electric supervision board has proposed that if th electric power regulatory commission does not have power pricing power, it will directly affect the effect nd authority of power regulation. Finally, the debate was compromised to the twentieth article of the power regulation regulations. That is, the price authorities of the state council and its electric power regulator supervise the electricity price in accordance with the law. And the regulatory commission on electricity pricing regulation only put forward the right to adjust the electricity price to the state development and reform commission. This configuration not only show that our current power regulation pattern has failed to achieve a complete separation of the government and supervision, and the electric supervision board has lost its core electricity price supervision function, which becomes the legal source of the ineffective dilemma of the power supervision because of the lack of regulatory authority.

The former defect of the old pattern makes it difficult for electric power to effectively balance the national development and reform commission, and the accident occurred in 17 provincial power grids at the beginning of 2018 is related to these defects. One of the direct causes of the accident lies in the shortage of electric coal caused by the contradiction between China’s marketable coal price and the planned electricity price. The old configuration pattern allows the national development and reform commission to enjoy electricity price regulation, uses the administrative examination and approval system for electricity price, and tries to ensure the stability of the electricity coal supply through “the coal and electricity price linkage”[4]. However, the fundamental solution is the contradiction between the price of coal electricity can only depend on the marketization of electricity price, and it is impossible for the electricity price to be marketed if the electricity regulatory authority is not allocated to the professional power regulator. Therefore, It is difficult to avoid the occurrence of similar accidents without reforming the old configuration.

B. New configuration pattern centralized allocation supervision functions abandons decentralization principle

It is in order to eliminate the defects of the old pattern that a new pattern of institutional reform was established in 2013. Although the new configuration has taken a step towards big energy, its shortcomings are still obvious. First, the new pattern is contrary to the development trend of government regulation. The new pattern is incorporated into the state energy bureau through the non-independent regulatory model of the united government and supervision, which means that a professional power regulator is not set up alone. In other words, the new pattern tends to the old configuration which is independent
regulatory model and returns to the non-independent regulatory model. This approach is obviously contrary to the upwind of independent regulators and the development trend of international regulation on the down drill road by government agencies.

Besides, abandoning the decentralization principle authorizes much to the state development and reform commission. The new pattern gives the ndrc’s supervisory function to the new state energy bureau under the national development and reform commission. The policies regulatory functions and the economic regulatory functions in power industry are all concentrated in the same department. The ndrc has the dual identity of the macro policy maker who enjoys the legislative power of electric power supervision and the micro supervisor who enjoys the power of law enforcement. Combined with the fact that Chinese enterprises are dominant in the Chinese electricity market structure, the new pattern will increase the risk of the power enterprises captured by the supervisors.

The malpractice of the centralized allocation model of the non-divided government and supervision in the new pattern has been already proved by history. China has used the centralized administration of government and enterprise to manage the power industry for a long time. As a direct monopoly enterprise of the state, the power industry department is a monopolistic enterprise, the power industry policy and industry planning maker, the three identity of the power industry law enforcement. Such a centralized configuration model leads to a lack of legal procedures for the exercise of power administration power, which makes it a habit to directly introduce energy planning, and policy and approval without the democratic argument and causes that administrative power and energy companies jointly dispose of national resources.

From the upper point of view, simply changing the settings of the regulatory agency without reflecting on the legislative form and content of the power regulatory function in china and optimizing the system, it is impossible for the government to effectively supervise the power industry.

V. THE OPTIMIZATION OF CHINA’S POWER REGULATION POLICY FUNCTION AND ECONOMIC FUNCTION ALLOCATION

Following the theoretical basis of power supervision power allocation and the principle of authority and responsibility, drawing on the successful experience of using the supreme order of legislation to configure power supervision power, china should borrow the opportunity to develop energy law and modify the power law. In the two laws, the specific configuration of the policy and economic functions of power regulation is provided to optimize the institutional form of the configuration. Specifically, the energy law and the energy regulation committee are set up by the energy law and the specific responsibilities of the two institutions and the legal relations between each other are clearly defined. Relying on the electric power law, it clearly stipulates the power and responsibilities of the ministry of energy and the energy regulatory commission in the aspect of power supervision, so that energy regulatory agencies will become the first professional regulatory institution designed by law in china. At the same time, the regulation of power regulation is amended so that it is consistent with the contents of the previous law. As far as the legislation is concerned, the following measures can be taken to optimize the policy and economic function of china’s power regulation.

A. The allocation of power supervision policy and economic function according to the independent supervision mode

Only changing the centralized allocation of the non-divided government and supervision and configuring the electric supervision power according to the independent regulatory model can we provide the system guarantee for fundamentally eliminating the long-standing malpractice that the integration of government and supervision and the integration of government and enterprise brought and prevent the alliance between the power enterprises and the government departments and reduce the emergency of administrative monopoly. Because the adoption of an independent regulatory model means a clear regulation of the decentralization of the policy and economic functions of electric power regulation through the law, set up an authoritative and professional power regulator which is separated from other governments including policy agencies, and grant all the economic regulatory functions of the power industry. Although people think the mode of separation of government and supervision is suitable for mature market economy countries and proposal that it is more suitable for china to adopt a system of political and administrative supervision in the short term, the experience of extraterritorial advanced market economy countries has shown that there is no direct causal relationship between whether the government and supervision are separated and whether the market economy is mature. Whether a country’s market economy is mature or not is not the decisive factor whether the country’s separation of government and supervision can be implemented or not.

The academic circles have reached the basic consensus on that the power supervision should be included into energy supervision in china, that is, to set up the power regulatory authority according to the energy regulatory mode including unified regulation of electricity, natural gas and oil and the establishment of the energy department as soon as possible. As early as 2002, it was suggested that china’s should build a great energy department similar to the United States, which was also taken into consideration in the state council’s institutional reform in 2013, but the proposal has not been adopted at present. The national development and reform commission and the large state-owned energy enterprises are the main forces against the formation of the energy department. The reason why the national development and reform commission is opposed to it is that it is reluctant to deliver the functions of the regulatory energy industry. However, for the large state-owned energy companies, it is because they still want to keep the government functions. The two objections both aim at maintaining the vested interests of the department, which should not be supported by legislation.

The legal status of china’s future energy department should be similar to the national development and reform commission. And the supervisory board can be set up in the department of energy, but its independent legal status should be given.
through legislation. The location of the department of energy is a comprehensive, macro, indirect policy regulator in the energy industry, but the positioning of the board is a professional, micro, and direct economic regulator in the energy industry. In the configuration of the power supervision function, the policy supervision function development and reform commission should be allocated to the ministry of energy. The economic supervision function now allocated to the national development and reform commission and the economic supervision function of the new energy bureau should be totally allocated to the national supervision committee.

VI. CONCLUSION

In some opinions of the state council on “further deepening the reform of the power system”, “revising the laws and regulations of the electric power”, “perfecting the power regulator” and “improving the organization system of the electric power supervision” have been brought into the key task of China’s recent reform of the power system. The author thinks the rational allocation of power supervision policy and economic functions is the institutional basis for effective supervision of the power industry. China should reconfigure the policy and economic functions of electric power regulation, abolish the power supervision function of the national development and reform commission, set up the department of energy as a policy department for energy regulation to undertake the policy function of power regulation and establish a professional regulatory agency for energy supervision and authorize all the economic regulatory functions including the electricity market access and electricity price regulation to the energy supervision agency through the formulation of “energy law” and the modification of “power law” and the independent energy regulatory model. Only in this way can we complete the key task of deepening the reform of the power system in China today—“revising the laws and regulations of the electric power”, “improving the organization system of the electric power supervision” and lay the institutional foundation for the Chinese government to get out of the ineffective predicament of power regulation.

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