

Contract pre-review and performance risk control model analysis

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Abstract: Under the background of continuous development of Chinese science and technology economy, social residents' demand for power resources is getting higher and higher. In order to strengthen its core competitiveness, electric power enterprises begin to focus on the study of contract management. According to the analysis of the current situation of contract performance management in power enterprises in recent years, as the core content of overall project management, the interest relationship between the construction unit and the enterprise will eventually be reflected in the contract. Therefore, it is necessary to strengthen the pre-review of the contract and the management and control of the performance risk, and always maintain a high level of risk awareness. Only in this way can the parties to the contract use legal means to safeguard their rights and interests. On The Basis Of Understanding The Risk Of Contact Review Of And Performance , This Patper Deeply Discusses The Forward Contract Model Of a certain power Project according To The system Constructed By the current power enterprise, so as to determine the contract management measures of the power enterprise.

Keywords: Contract pre-review; Risk of performance; Controllable model; The electric power enterprise

1. Introduction

In the construction and promotion of electric power construction projects, it is easy to be influenced by subjective and objective environment and conditions. If the contracting parties cannot fulfill the contract terms and achieve the expected objectives of the contract, it will cause great economic losses and social impact. When the contracting parties reach the purpose of the contract in accordance with the provisions of the contract, they can perform the contract literally or perform the contract to the best of their ability. There is a substantial reduction in performance between the literal performance in accordance with the specific provisions of the contract and the best performance in accordance with the cooperative spirit of the contract, and the final results of the two are not consistent. In the construction of modern enterprise development, the implementation of any event all need to follow certain procedures and provisions, especially in the electric power enterprise project management, needs, and other business units to build cooperative relations, so in order to protect the good relations of cooperation must sign a contract, both to determine the rights and responsibilities of both parties, and can safeguard the interests of both from the base. [1.2.3]Among them, contract management refers to the two parties to the contract in order to achieve the purpose of the contract, according to their own situation and relevant laws and regulations, in the process of contract signing, execution, change and other behaviors; Contract pre-review refers to the examination of the qualifications of both parties before signing the contract to determine whether the contract is real and effective after signing, whether the real will of both parties is expressed, and whether there are some obviously unfair provisions in the contract. After the pre-review of the contract is completed, if both parties have doubts, then effective improvement suggestions should be put forward according to the specific problems, and then both parties will modify and confirm according to the specific situation.[4.5]

According to the accumulated experience of construction management of electric power enterprises in recent years, the contract review work should be operated in strict accordance with relevant laws and regulations, which is also the necessary procedure before the formal signing of the contract, which can effectively avoid unnecessary disagreements and disputes during the

performance of the contract, and improve the probability of contract performance. Since the purpose of contract pre-review and performance is to protect the basic rights and interests of the parties to the contract and ensure that the contract can achieve the expected transaction purpose, the contract review should meet the following conditions: first, the contract transaction is legal, or the illegal cost is controlled within the range of affordability; Secondly, the terms of the contract can meet the needs of one party, and the relevant rights and responsibilities are guaranteed and clear. Finally, the substantive and procedural issues of the transaction will not lead to serious consequences, and the rights and obligations of the parties will be clear.

Based on the analysis of the system structure diagram of intelligent power enterprise shown in Figure 1 below, it can be seen that enterprise managers should follow the following basic principles when pre-examining and performing contracts: First, maximize the profits of all parties involved in the transaction. After the establishment of the original contract rule system, it is necessary to clarify a better transaction order and gradually improve the actual transaction efficiency. Secondly, we should insist on the priority principle of high, flat and precise need regulation. In the process of contract implementation, the use rules should be strictly examined, and the absolute use terms should be given priority. Third, risk prevention and control should adhere to the principle of addressing both the symptoms and root causes. In the pre-review of the contract, we should not only use legal means to control the content of the transaction, but also combine legal technology to assist the customer to implement commercial control, so as to truly achieve the legal and commercial objectives; Finally, we should adhere to the basic principle of combining internal and external control of the contract. After determining the basic standards, technical means and final results of the contract pre-review, the staff should conduct integrated research with the customer's trading position, stage and bargaining power.

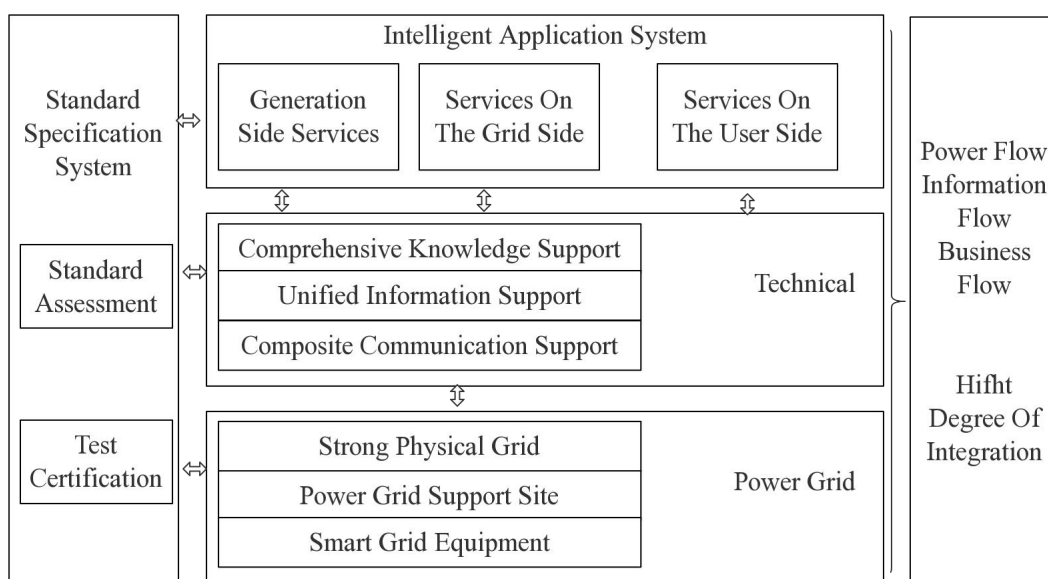


FIG. 2 System structure diagram of intelligent power enterprise

On the basis of understanding the current situation of the construction management of power enterprises, this paper systematically studies the contract pre-review and performance risk, and combines the power construction project to build a controllable model, and finally puts forward effective measures for the effective contract pre-review and performance risk.

2. Method

2.1 System Analysis

Based on SG-NC, five functions including budget management, accounting management, expense management, consolidated statements and penetrating query were completed. Based on

micro-service, tax management functions were expanded, and demand analysis and system design and development of new tasks on the mobile reimbursement APP were completed. The specific structure is shown in Figure 2 below:[6.7]

Basic Information	Voucher Processing	Book Search	Accounting Statements	System Management
Operator Setting	Certificate Entry	General Ledger	Account Balance Sheet	
Password Setting	Voucher Printing	Three Bar Account	The Balance Sheet	System Backup
Basic Settings	Certificate Details	Account Number	The Income Statement	Import And Export
Subject Setting	Summary Of Credentials	Multi Column Account	Statement Of Cash Flows	Providing Continuing
Project Settings	Subject Details	Auxiliary General Ledger		
Instructions		Auxiliary Ledger		

Figure 2 Structure diagram of the system

First, budget management. The SG - NC system budget management module to achieve the enterprise's annual budget management, cannot satisfy the business enterprise internal control "comprehensive, full, whole process" needed for the budget management, this project construction was carried out on the budget management module function is perfect, will extend to department budget management, to expand the annual budget for the monthly budget, implementation of department budget, monthly budget of fine management.

Second, accounting management. New commercial bill of exchange change, commercial bill of exchange change, transactions reconciliation, original voucher electronic, cash and general ledger reconciliation, project cost and general ledger reconciliation functions. Through information means to realize the reconciliation of financial and business accounts, business departments and financial departments from the tedious daily reconciliation work, further improve work efficiency.[8.9]

Third, cost management. Improve the function of expense management, including expense application, loan repayment, expense reimbursement, etc., effectively associate expense management with budget management, optimize expense reimbursement process, and strengthen standardized management.

Fourth, consolidated statements. To perfect the functions of consolidated statements, with the parent company and its subsidiaries constituting the accounting body, and based on the individual financial statements prepared separately by the holding company and its subsidiaries, the financial statements prepared by the holding company reflecting the consolidated financial position and operating results of the group after offsetting the internal current accounts of the group, The consolidated statement includes the consolidated balance sheet, consolidated income statement, consolidated statement of cash flows or consolidated statement of changes in financial position,

Fifth, penetrate the query. The new penetrating query function is added to meet the financial personnel's query and statistical needs of business data step by step, starting from business report data and based on the association relationship between business documents. With the function of cross-year inquiry, financial statements can be used to jointly check the general ledger, subsidiary ledger, accounting voucher and business document, trace the business source, and meet the demand of provincial industrial units for business data inquiry, statistics and analysis.

Sixth, tax administration. We will improve the invoicing and receipt functions of enterprises, and add functions of tax declaration, output/input statistics query, small tax management, and operation statistics.

Seventh, mobile reimbursement. The mobile reimbursement function is added. The reimbursement personnel can fill in the expense application form, reimbursement form, loan form and repayment form through the mobile APP, and the examination and approval personnel can

conduct mobile examination and approval. The mobile reimbursement function is interconnected with the cost management in the SG-NC system and is effectively associated with the budget management. The reimbursement process follows the approval process configured on the WEB end.

2.2 Controllable Model

This paper starts with the forward contract of electric power industry, and how to set the contract price is the basic condition of the forward contract market. Due to the differences in the selection of forward contract transaction models and actual pricing methods among electricity market members, market members will give priority to their own interests when determining the contract price, so the current construction of forward contract pricing model in the electricity market will maximize the interests of one party. At present, the research on the power forward contract model at home and abroad is not perfect, and there are great differences in the actual pricing methods, which are reflected in the following:

First, risk-adjusted prices. Considering this content as a pricing model, it is necessary to propose a pricing method combining the cross-warranty between the two electricity markets. In other words, the forward contract price is the sum of the baseline price and the risk-return. The specific formula is as follows:

In the above formula, PC represents the forward contract price, Pb represents the forward contract term price, and P represents the risk-return. In this pricing method, a positive linear relationship of electricity price in the electricity market should be assumed, and the specific formula is as follows:

The baseline prices are as follows:

Secondly, the real-time electricity price pricing model. This method is the main content of the current discussion of electric power enterprises, after the study and implementation of electricity price change sequence, to build the corresponding pricing model simulation, in the choice of a variety of pricing methods to determine the contract price. Compared with ordinary commodity prices, electric energy price changes have the characteristics of spikes, steps, and mean recovery, etc. Therefore, modeling of electric power price behavior is a challenging research, and no recognized pricing model has been developed so far. The specific model is shown in Figure 3 below:

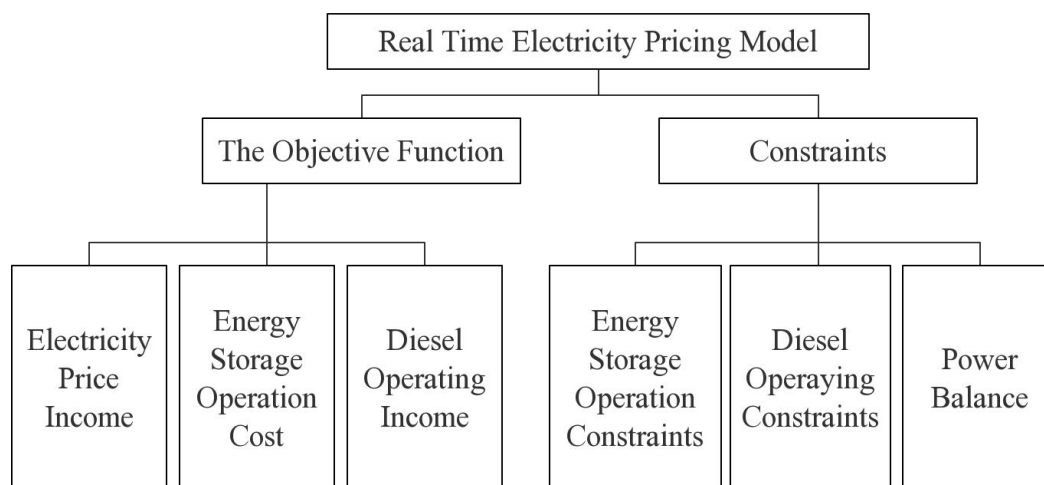


FIG. 3 Model structure diagram of real-time electricity price pricing

Finally, the predictive pricing model of marginal cost of generation is presented. Because THE power generation IN a certain region has monopoly characteristics, the actual electricity price needs to be determined by combining the short-term marginal cost or quotation of power enterprises, so

the forward contract pricing model based on the short-term marginal cost of power generation or quotation uncertainty of power enterprises is put forward in practical research. Some scholars have proposed in their studies that when choosing forward contracts between independent power generators and power enterprises, they can formulate their own rational contract pricing models by combining the uncertainty of their respective generation costs. The contract price is the sum of the expected cost and the expected contract penalty. The pricing principle of marginal cost is shown in Figure 4 below:[10]

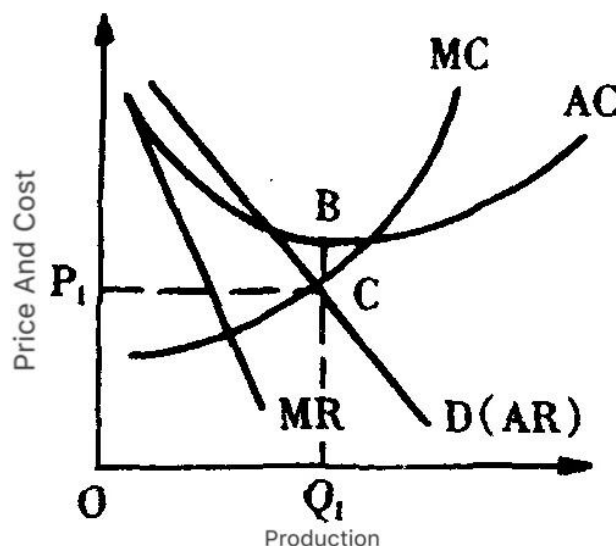


Figure 4. Pricing principle diagram of marginal cost

3. Result analysis

After clarifying the current contract pre-review and performance risks of power enterprises, according to the forward contract model proposed in this paper, the following assumptions are put forward: first, both parties should estimate and analyze the probability distribution function and probability density function of the future spot power price in combination with the forward public information released by the market; Secondly, when the electric power enterprise sells electric energy, the cost of unit electric power is D (yuan /KWh), the loss of unit electric power caused by power supply interruption is M (yuan /KWh), and the other income of users is Y (yuan /KWh). Finally, the ambiguity of user requirements is not considered. If the two parties estimate by combining the forward disclosure information provided by the spot market, the final curve shown in Figure 5 below can be obtained:

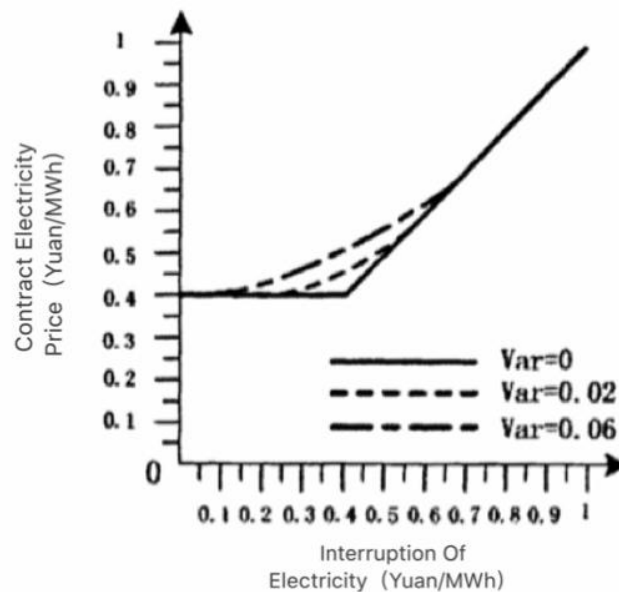


FIG. 5 Experimental curve

Combining the above analysis, we can see that the contract price is always greater or equal to the interruption price. When the interruption price is small, the probability that the user may interrupt the power supply is small. If the user interrupts the power supply at this time, only a small value can be obtained, and the contract price will also decrease, but it is closer to the expected value of the spot market price. With the continuous increase of the interruption price, the possibility of the user interrupting the power supply enterprise will rise accordingly. At this time, the interruption of the user's power supply is likely to bring more value, and the contract price will also increase.

4. Conclusion

Above all, contract management as an important content in the electric power enterprise management activities, from management to employees at the grassroots level from the ideological system to the management practice, should be given enough attention, science, reduce the risk of the contract, to solve the problems facing the pre-qualification contracts, for enterprise operation and management activities of the normal and improve enterprise's core competitiveness has a positive impact.

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