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Research on Financial Risk Management for Electric Power
Enterprises

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Abstract

Primarily this paper emphasizes the importance and standard process of financial risk engineering for electric power enterprises, and then identifies the risks which are most likely to occur in business activities. In addition, this paper established an index system for financial risks. Taking Linfen Power Supply Company as an example, this paper analyses its financial status, and discovers two key issues in its business activities. Finally some proposals are provided to handle these problems.

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Introduction

The electric power enterprises play a significant role in not only the state economy security but also people's daily life and the stability of the society. Once electric power enterprises are in financial crisis, the entire economic will be in dilemma. Therefore, it is important to monitor the electric industry, analyze and evaluate its financial status, and use financial risk engineering to quantify the operational financial risks brought by the environment in order to effectively avoid the financial risks^[1].

The financial risk is the probability of loss inherent in financing methods which may impair the ability to provide adequate return. The risk management of electric power enterprises complies with the general risk management process, including financial risk identification, financial risk measurement, and financial risk control.

The financial risk management processes of electric power enterprises are as below:

- Financial risk identification

Financial risk identification refers to distinguishing risk events and discovering potential causes before risk occurs. It is a key element in risk management.

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- Financial risk measurement

Financial risk measurement makes use of various prototypes or methods to quantify the financial risks, which provides accurate data to prevent and control financial risks.

- Financial risk control

On the basis of the financial risk measurement, financial risk control means to take appropriate strategies and preventions to mitigate and transfer risks.

Financial risk Identification

Financial risk identification for electric power enterprise

- Policy risks

Policy risks are the risks arise from the government's financial policies which are related to the enterprise operation activities. Electric power enterprises as the giant state-owned enterprises, their operation and development are seriously affected by the government policies. Moreover, considering social responsibilities, electric power enterprises inevitably face policy risks^[2].

- Investing and financing risks

As the basis of national economy, electric power enterprises should carry out large scale investment of fundamental construction which is required by the policies. However, in their business operation, risks may be high if the enterprises don't take careful consideration of fair return, in time and stable return of investment^[2].

- Informatization risks

As the power market is continuing to be deeply reformed and the development of commercial market, the State Grid has started "SG186" project which puts ERP system into use as its core part and changes financial management pattern of electric power enterprises. Therefore, planning and constructing the ERP system will play a key role in financial risks management for electric power enterprises.

- Nature risks

Nature risks refer to those risks caused by natural force which occur in commercial, productive and living activities, such as earthquake, tsunami and so on.

Causes of financial risks in electric power enterprise

Financial risks result from various factors which are mainly divided into following categories^{[3][4]}:

- Changing macro-economic atmosphere;
- Lack of risk awareness;
- Poor policy-making caused by unscientific method;
- Complicated internal financial relationship

Financial risk measurement

Financial risk index system

Financial risk measurement means to evaluate and quantify the effect and consequence of financial risks. This paper chooses 10 indexes to establish the system. Figure 1 shows the structure of this index system^[5].

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