

Transition of the Administrative Mode of Electricity Account in Power Supply Enterprises

Ying Feng

State Grid Jiangxi Electric Power Research Institute

Keywords: Intensive management; Centralized charging; Management of electricity fees; Electricity bill retrieving

Abstract. In the power marketing, electricity management is a very important section. In recent years, with the constant deepening of national power system reform, higher requirements have been proposed for the management of electricity bill since the traditional mode is unsuitable for the power system reform. In order to solve the disadvantages of traditional administrative mode and further strengthen the intensive management of electricity bill with powerful supervision on the management, power supply departments should establish correspond settlement center by the superior demands.

Introduction

Electricity bill retrieving is an important section of the whole production process as well as the final embodiment of the achievements. With timely recovery of electricity bills, power supply enterprises can maintain and realize a larger reproduction so as to meet the increasingly higher demands for national life and production electricity. With the constant deepening of electricity system reform, electricity accounting has changed from the original manual accounting to computerizing accounting to systematic informatization accounting. Nowadays, the centralized electricity accounting system is advocated in the power system in the whole country, which can effectively evade electricity stealing and wrong records. Thus, the electricity recovery rate is becoming higher with safer management of electricity funds.

The further improvement of the centralized accounting business for electricity bills can not only improve the accuracy of e-bill, but it can also reduce the business procedure with less manual cost. More importantly, administrative concept can be further promoted by adjusting the organizational structure and learning from advanced administrative methods.

Problems Existing in the Management of Electricity Bills in Electricity Enterprises

It is Difficult for Marketing Department and Financial Management Department to Check the Electricity Bill. At present, accounting and management of electricity bills in most power enterprises cover power charge receivables and paid-in electricity bills, but this electricity business system is lack of a unified management mode; instead, it divides into marketing controlling system and financial management controlling system, which are charged by marketing department and financial management department. The marketing department is responsible for recovering the electricity bills of users, while financial management department undertakes the transferring and accounting business of various items. Therefore, the two departments have different tasks in management, which leads to inaccurate and invalidated financial data of electricity bills. It can produce a bad effect on the development of whole power market.

The Charging Information and Recovery Index of Electricity Bill is Imperfect. Currently, users' demands for power supply are changing constantly with timely update of accounting information. So power enterprises should make fast adjustment according to these changes to ensure the accuracy of charging information. However, in practical process, most power enterprises can't satisfy this requirement.

Usually amortization of electricity bills as well as important bad debts information can't be dealt and shared between marketing and financial management departments rapidly. Besides, during the

processing of bad debts of electricity bills, the recovered fees can't be reflected in the system of marketing and financial management departments synchronously, which can lead to different accounting results. Thus, the accurate data will be reported late because the two departments should check the accounts repeatedly.

Optimization of the Personnel for Centralized Accounting of Electricity Bills

Addressing the optimized design of centralized accounting procedure, enterprises should make corresponding adjustments by the changes. From the status, we find that some irrational situations may exist due to inappropriate manual assignment. Therefore, power marketing system should improve their efficiency and quality of service, and meanwhile they should strengthen the relationship among meter reading staff and accounting staff and so on to achieve a better coordination.

Thus, administrative levels should be reduced to reach less information distortion and faster information communication so as to promote the overall efficiency of electricity accounting business. The organizational structure has been adjusted as follows. See Fig. 1.

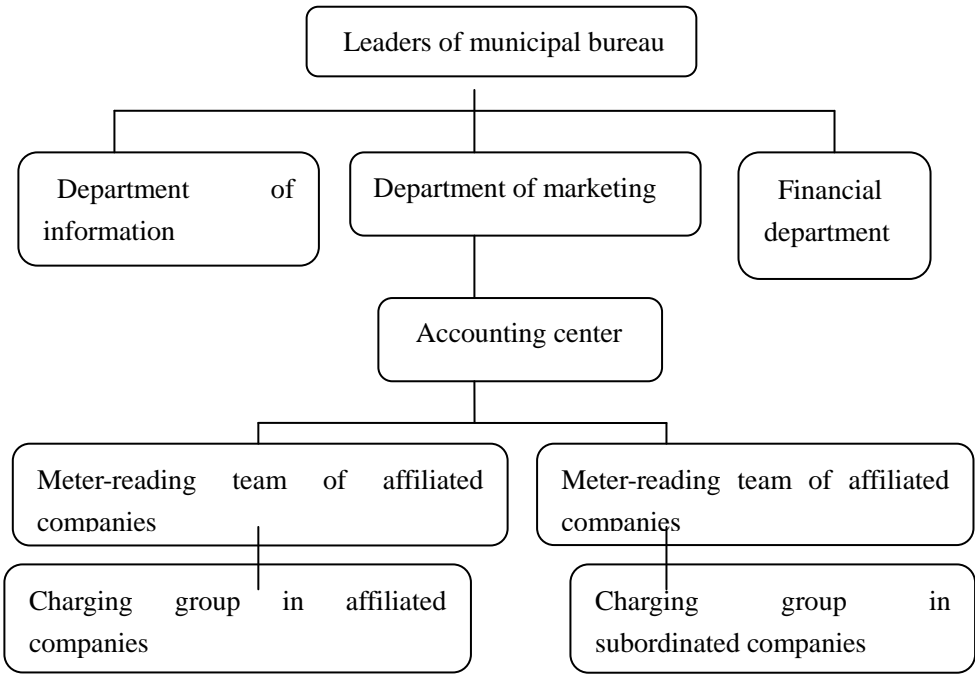


Figure 1. Accounting business

With optimization of organizational structure, accounting personnel in both municipal bureau and subordinated companies belong to the accounting center. They are responsible for the workers directly and respectively, managed by the municipal market department. In this way, the business process can be optimized organizationally to reduce the overall time of operation and obtain more time for rechecking. Meanwhile, we find that rechecking work of field meter reading workers are not reduced with large amount of warning information in marketing system. All problems point to a systematic rechecking condition.

The Advantages of Optimized Electricity Management

Compared to the traditional electricity accounting mode, the optimized centralized accounting mode is a new type of electricity management mode with obvious advantages. With the establishment of electricity accounting center, centralized management can be carried out to realize a technical, optimized and integrated management process, which can reduce the operation cost of electricity

management with less capital idle and waste. Besides, the overall performance and scaled effect can be promoted. It mainly manifests in the following aspects.

It is Beneficial to Achieve Centralized Management of Electricity Bills and Accelerate the Collection and Usage of Capitals. With the centralized management of electricity bills, all electricity fees will be transferred to municipal account and transferred to corporate account in the same day directly, which has changed the traditional mode of dispersed charging and accounting. Thus, some links can be reduced to avoid capital idle and waste, which can obviously accelerate the collection of electricity bills and reduce capital deposit of basic electricity accounts.

It is Beneficial to Optimize the Management Process of Electricity Bills by Implementing Unified Management in Both Rural and Urban Areas. The electricity accounting center is the administrative department. It assigns meter reading plans to subordinated departments each month by arranging the meter reading time, checking time, release time, charging time, accounting time and reporting time in unity. That is, the whole district is in the same step, which can greatly improve the working efficiency of each section without regional difference.

Centralized Accounting is Good for Marketing and Financial Departments to Check the Accounts. Electricity reconciliation has always been a difficulty for electricity accounting, which is affected by various aspects such as customers, power supply business, finance and bank. Besides, due to the disordered statistic means, there have always been different accounting data. Therefore, it is of great positive effect for marketing and financial departments to establish a centralized accounting system.

Conclusion

In the early stage of electricity bill management, the traditional manual management modes of power enterprises mainly complete the accounting and checking work are detailed accounts management, bank deposit diary management and management of overall accounts. Management of e-bill in power enterprises relates to various aspects of users and accounts. At present, power enterprises have had more consumers with constantly higher demands for public power supply service. Thus, it is becoming increasingly important for them to use efficient and scientific method to conduct accounting management for electricity bills.

References

- [1] Baranowski L L, Snyder G J, Toberer E S. Concentrated solar thermoelectric generators [J]. *Energy & Environmental Science*, 2012, 5(10):9055-9067.
- [2] Armaroli N, Balzani V. 10. Solar Heat and Electricity [M]// *Energy for a Sustainable World: From the Oil Age to a Sun-Powered Future*. Wiley - VCH Verlag GmbH & Co. KGaA, 2010:167-201.
- [3] Bell W P, Wild P, Foster J. The sensitivity of concentrated solar power yield to climate change[C]// *Australian Conference of Economists 2015*. 2015:1-10.
- [4] Fan L, Norman C S, Patt A G. Electricity capacity investment under risk aversion: A case study of coal, gas, and concentrated solar power [J]. *Energy Economics*, 2012, 34(1):54-61.
- [5] Talavera D L, Pérez-Higueras P, Ruíz-Arias J A, et al. Levelised cost of electricity in high concentrated photovoltaic grid connected systems: Spatial analysis of Spain [J]. *Applied Energy*, 2015, 151:49-59.
- [6] Massetti E, Ricci E C. An assessment of the optimal timing and size of investments in concentrated solar power [J]. *Energy Economics*, 2013, 38(2):186-203.
- [7] Clifton J, Boruff B J. Assessing the potential for concentrated solar power development in rural Australia [J]. *Energy Policy*, 2010, 38(9):5272-5280.

- [8] Fraas L M, Avery J E, Nakamura T. Electricity from concentrated solar IR in solar lighting applications[C]// Photovoltaic Specialists Conference, 2002. Conference Record of the Twenty-Ninth IEEE. IEEE, 2002:963-966.
- [9] Kost C, Pfluger B, Eichhammer W, et al. Fruitful symbiosis: Why an export bundled with wind energy is the most feasible option for North African concentrated solar power[J]. Energy Policy, 2011, 39(11):7136–7145.
- [10] Sarah K, John G. Multijunction solar cells for conversion of concentrated sunlight to electricity.[J]. Optics Express, 2010, 18(9):73-8.
- [11] Assaf G, Bronicki L Y, Fisher U. Method of and means for producing power using concentrated brine: US, US 5755102 A[P]. 1998.
- [12] Abbas M, Boumeddane B, Said N, et al. Techno Economic Evaluation of Solar Dish Stirling System for Stand Alone Electricity Generation in Algeria [J]. Global Health Action, 2015, 8(4):258-267.