

Analysis on Hydropower Cost Management in Colleges and Universities based on Internal Control Perspective

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Abstract. Hydropower cost management is an extremely important link in the logistics management of colleges and universities. Improving the efficiency of hydropower management is the key point to optimize the logistics management of colleges and universities. Based on the current problems of hydropower management in the logistics departments of colleges and universities, this paper proposes a solution based on internal control perspective to provide reference for universities to strengthen hydropower management.

Keywords: hydropower management; countermeasures; internal control perspective.

1. Introduction

With the continuous development of society, energy issues have received increasing attention. Building a conservation-oriented university is an inevitable requirement for the development of colleges and universities today, and an important task for universities to implement the scientific development concept and promote sustainable development. However, in recent years, according to statistics, the per capita energy consumption and water consumption of college students in China are four times and two times higher than the per capita energy consumption of the national residents. There are 2,542 colleges and universities across the country, and there are about 30,504 secondary water supply equipment. Each set of equipment is calculated according to the installed power of 15kW (excluding water price), and the annual electricity cost needs 800 million. The data shows that the actual water consumption per student per day exceeds the actual water requirement by about 25 L. this traditional hydropower management method has caused serious waste of hydropower resources in colleges and universities, and it has been difficult to meet the development needs of colleges and universities. According to rough estimates, the expenditure on water and electricity in colleges and universities has accounted for more than one-fifth to one-fourth of the school's office expenses, which has greatly increased the expenditures incurred by colleges and universities due to inadequate infrastructure. In order to save water and electricity resources, lead the society's green environmental awareness, improve the utilization rate of college funds, and reduce waste in all aspects, it is necessary to strengthen the internal control of hydropower cost management in universities across the country.

2. Problems in the Internal Control of Hydropower Management in Colleges and Universities

2.1 Management Risk Awareness is Weak, Ignoring Internal Control

As a social non-profit organization, the core of the university is student training, daily teaching, and academic research. However, this does not mean that colleges and universities should ignore their economic responsibilities. Especially in the logistics department of colleges and universities, the system is relatively loose, and the responsibilities between departments are not clear., mutual evasion, poor risk awareness. For the operation of funds and internal control issues, even think that it is only related to the financial department, lack of understanding of the importance of internal control, lack of a sound and effective internal control management system. Especially in hydropower management, blindly the land advocates for conservation, but it cannot be governed by the source of the logistics department that controls the cost of capital and water and electricity. Therefore, water-saving and energy-saving activities are often difficult to achieve better results in colleges and universities.[1]

2.2 The Daily Affairs of Colleges and Universities are Complex and Internal Control is Difficult.

Colleges and universities are places for teaching and educating people, bringing together students from all over the country and even abroad. To a certain extent, the university environment has gradually become community-based. Teaching is only a part of the daily life of colleges and universities. In addition to this, there are various economic activities, and these activities will inevitably involve the logistics department. For hydropower management, it seems simple, but it covers the entire university. From the use of water and electricity in the teaching building, laboratory research, to student dormitory, canteen restaurant, all linked to hydropower management. Hydropower has a wide area and a large amount of use. It is divided into different facilities from different places and is difficult to compare. At the same time, the logistics department of colleges and universities is weak in the construction of energy metering infrastructure. The energy meter is mechanical instrument, which often relies on manual metering. Some colleges and universities even have inadequate hydropower equipment and lack of water meter, which makes it difficult for teachers and students to understand themselves in time. The use of water and electricity, the phenomenon of wasting water and electricity without knowing. Due to the weak infrastructure of hydropower, it is difficult to effectively carry out data energy analysis, and it is impossible to grasp the current status of hydropower application in a timely manner, resulting in the waste of hydropower energy. This not only consumes human resources, reduces measurement efficiency, but also has a long interval of data collection, which is not conducive to statistical analysis of electric energy and cannot find abnormal problems in time. This also makes logistics managers lack the enthusiasm of hydropower cost control.

2.3 The Logistics Department has Low Quality and Lacks Professional Skills.

A well-organized logistics department with internal control system can not only improve the efficiency of daily management of colleges and universities, but also promote the smooth progress of teaching. However, most colleges and universities have not done so, which can be seen from the uncontrolled growth of hydropower fees in colleges and universities. On the one hand, although there are many highly educated teachers and students in colleges and universities, logistics management personnel may not have the same high level of knowledge and quality. On the one hand, the logistics department often ignores hydropower management. Most of the water-saving and electricity-saving facilities inside the school are old and lack of advanced equipment. The water heaters used in most of the dormitory buildings are more or less old and ineffective. When the students swiped the water, although the water was stopped, the faucet still had a small amount of water for 30 seconds. The personnel of the logistics department turned water TV into public resources and turned a blind eye to leakage and leakage. On the other hand, due to the large proportion of temporary workers in the logistics department of the university, the age structure is old, and most of the employee's lack work experience and professional skills. In the area of hydropower management, there is a lack of effective management and supervision systems.

2.4 Limited Internal Supervision and Weak Auditing

The supervision and auditing within the university does not necessarily have to be enforced by external agencies, but is often arranged directly by the school leadership. At the same time, auditing is limited to financial auditing and rarely involves management. This makes the lack of mutual restraint between the supervision under the same leadership and the supervised department, which in turn leads to the invalidation of supervision. Therefore, in terms of hydropower management, all departments only manage according to traditional management methods, and even slack off hydropower management. For the loopholes in hydropower management, because there is no supervision, no one is often interested, and they cannot actively and timely take countermeasures. Waste of water and electricity.

3. Countermeasures based on Internal Control Perspective

3.1 Set up the Hydropower Management Division in the Logistics Department

For hydropower problems, the hydropower management division can be set up under the financial institution of the Logistics Management Office. The main functions are to count the water and electricity consumption of the whole school, as well as the water and electricity of various departments and units, to make horizontal and vertical comparisons, to supervise the water and electricity consumption, and to install Meters, regularly test hydropower-related equipment to achieve macro-control. By setting up a special department to manage hydropower, the logistics department can effectively solve the problem of neglecting hydropower management. Among them, the equipment can be tested according to its use status. For three types - excellent condition without repair, problems need to be repaired and old and need to be updated. For the three types of equipment, three corresponding measures should be taken: the first type of equipment should be properly maintained and the work should be continued. For the second type of equipment, special personnel should be hired to repair in time to restore the original state at the lowest cost; for the third type of equipment, it can only be replaced to prevent the leakage of electricity and electricity.[2]

3.2 Appointing Specialized Personnel to Manage Hydropower

The logistics management personnel of colleges and universities not only did not pay attention to the problem of hydropower management, but also did not know the situation of water and electricity consumption in the investigation of a certain university. The author found that for the consumption of hydropower, the university did not set up special personnel statistics, and there was no sound equipment. Hydropower visualization is simply not possible. Therefore, on the basis of the corresponding equipment, it is essential to assign the corresponding personnel in the logistics department to manage the water and electricity consumption of various departments and teaching buildings and dormitories. Appropriately increase the investment in hydropower management talents, increase employee compensation, in order to scientific and refined management of hydropower, and regular skills training for employees.

3.3 Divide the Various Departments, Teaching Buildings and Dormitory of the University into Multiple Cost Centers.

According to the idea of responsible accounting, the departments, teaching buildings and dormitory that consume hydropower in colleges and universities can be divided into multiple cost centers for enterprise management. It is necessary to determine the charging system for reasonable prices, that is, to implement various departments and units in hydropower management. Self-operated, independent accounting and reasonable profit, its operation mode is similar to that of water company and power bureau. It calculates hydropower fee according to its hydrometer, so as to optimize resource allocation and improve efficiency [3]. In this way, all departments and units You can always know your own water and electricity consumption, find the reasons in time when the water and electricity consumption is too large, and take cost-saving measures. Each cost center is the object of statistics of hydropower management personnel. Hydropower management personnel must not only count their water and electricity consumption, but also calculate their increase. The deduction, increase and decrease rate, as an assessment indicator. This will solve the problem that the scale of the university is large and the work is complicated, which makes the hydropower management difficult to carry out.

The scope of the specific cost center can be adjusted according to the scale of the university. At the same time, for each The cost center assigns the responsible person, if there is too much water consumption in an assessment target, the responsibility of the responsible person can be directly investigated..

3.4 Building an Internal Control Team

China's "Regulations on Internal Control of Administrative Institutions (Trial)" was officially implemented on January 1, 2014. Since then, universities have begun to build an internal control system. For hydropower management, internal control systems can also be constructed to reduce water and electricity consumption. Specifically, it can be modelled on the internal control organization framework of the university, that is, the senior leadership of the school acts as the administrator, and several internal control groups and risk assessment teams are set up for hydropower management. Each internal control team supervises the water and electricity consumption of the corresponding cost centers. At the same time, the risk assessment team exists to measure risks, ensure the independence and effectiveness of internal control work, and share and transparent information.[4]

4. Conclusion

Whether the per capita water consumption or electricity consumption of colleges and universities is much larger than the national per capita data, this is contrary to the idea of building a conservation-oriented university. To solve this problem, it is necessary not only to increase the awareness of water users in colleges and universities, but also to strengthen internal control over the cost of water and electricity. A good hydropower management system can play a supervisory role, effectively improving the efficiency of water use and electricity consumption.

In summary, the hydropower management of colleges and universities should start from the root cause. With the rapid change of the way of social development, the cost management method of colleges and universities also needs to be improved. This paper starts from the perspective of the internal control of the logistics department of the university, and makes the internal management of the logistics department standardized, transparent and refined. It implements the cost control of hydropower from the top to the bottom, from top to bottom, and provides control for other related costs of the university. Drawing on it, the hydropower management and resource conservation in colleges and universities really play a role.

References

- [1]. Zhou Xumei. Research on the internal control audit mode of colleges and universities based on risk-oriented [j]. *Finance and Accounting News*, 2018 (07): 113-116.
- [2]. Gong Xiaofeng. Analysis on the social reform of catering cost management in colleges and universities [j]. *Friends of Accounting*, 2011 (09): 104-106.
- [3]. Zhang Keding. On the Enterprise Management of Hydropower Departments in Colleges and Universities [j]. *Journal of Tianjin Textile Institute*, 1997 (03): 72-75.
- [4]. Zhao Hongwei. The basic scope and framework construction of internal control in colleges and universities [j]. *Audit Research*, 2015 (03): 108-112.