

การศึกษาเปรียบเทียบการแปรรูปรัฐวิสาหกิจ  
กับความผูกพันองค์กรของพนักงาน ในองค์กรรัฐวิสาหกิจด้าน  
การพลังงานของประเทศไทย

A Comparative Study on the Public Enterprise Reform  
and the Organizational Commitment  
of the Public Enterprises in the Energy Sector  
in Thailand

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การวิจัยในครั้งนี้มีวัตถุประสงค์ เพื่อศึกษาลักษณะความผูกพันองค์กรของพนักงานในรัฐวิสาหกิจด้าน  
การพลังงานของประเทศไทย ที่มีโครงสร้างแตกต่างกัน 3 ประเภทตามระดับการแปลงสภาพองค์กรที่เกิดขึ้น  
จากนโยบายแปรรูปรัฐวิสาหกิจ ได้แก่ องค์กรที่ยังไม่มีการแปลงสภาพองค์กร (แบบที่ 1) องค์กรที่มีการ  
แปลงสภาพเพียงบางส่วน (แบบที่ 2) และองค์กรที่มีการแปลงสภาพเสร็จสิ้นแล้วทั้งองค์กร (แบบที่ 3) ผล  
การวิจัยปรากฏว่า มีความแตกต่างกันทางสถิติอย่างมีนัยสำคัญระหว่างระดับของความผูกพันองค์กรของพนักงาน  
รัฐวิสาหกิจทั้งสามแห่งในด้านความผูกพันองค์กรเชิงจิตใจ และความผูกพันองค์กรเชิงบรรทัดฐาน แต่  
ไม่มีความแตกต่างกันในด้านความผูกพันองค์กรเชิงความจำเป็น นอกจากนี้ ยังพบว่า ปัจจัยเกี่ยวกับพฤติกรรม  
ที่สัมพันธ์กับการเปลี่ยนแปลงองค์กร มีผลกระทบต่อระดับความผูกพันองค์กรของพนักงาน ในขณะที่  
ปัจจัยเกี่ยวกับวิธีการปฏิบัติงานด้านการบริหารทรัพยากรบุคคลและปัจจัยเกี่ยวกับค่านิยมที่เกี่ยวข้องกับการทำงาน  
ส่งผลกระทบต่อระดับความผูกพันองค์กรของพนักงานรัฐวิสาหกิจที่ทำการศึกษา

คำสำคัญ: ภาคพลังงาน นโยบายการแปรรูปรัฐวิสาหกิจ การเปลี่ยนแปลงองค์กร ความผูกพันองค์กร

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## ABSTRACT

The purpose of this study is to examine the impact of public enterprise reform policy on the attributes of organizational commitments in the public energy enterprises in Thailand. It compares three structural types of public energy enterprises: totally state-owned public enterprises (type I), partially transformed public enterprises (type II), and totally transformed public enterprises (type III), based on the degree of state ownership and the level of management control that exists in the public reformed organizations, by analyzing the presence of the desirable attributes of organizational commitment as perceived by employees. Findings indicate that there are statistically significant differences in the level of some dimensions of organizational commitment (affective commitment and normative commitment) between the three types of public energy enterprises. The lack of a structural type difference holds for only continuance commitment. The results also indicate empirical evidence concerning the causal relationship between the antecedents and organizational commitment. Whereas change-related behaviors show a direct negative influence on organizational commitment, both HRM practices and work-related values indicate direct positive influences on them.

**Keywords:** energy sector, public reform policy, organizational change, organizational commitment

## INTRODUCTION

The public enterprise sector has played a significant role in accomplishing development objectives in developing countries. Governments are managing and expanding the public enterprise sector with the intention of promoting and accelerating national development. These public enterprises operate in all development sectors of nations, including public utilities and energy.

The energy sector in Thailand has been one of the most important sectors because the country

depends largely on imported energy at a considerable cost each year. In 2006, Thai energy consumption accounted for a value of approximately 1,488 billion Baht, which was almost 19 percent of the GDP, and the value of imported energy was greater than 912 billion Baht (Energy Policy and Planning Office, 2006; National Economic and Social Development Board, 2007).

In order to cope with the rapidly increasing demand on energy in Thailand, on September 1, 1998, the Master Plan for State Enterprise Sector Reform for transforming state enterprises in Thailand received the cabinet's approval in order to reduce financial burdens as well as to improve the efficiency and effectiveness of major public enterprise sectors. This plan aims at reforming and privatizing key utility and infrastructure sectors in Thailand. Of these, the energy sector is one of the four key sectors that are given priority in the reform policy.

At present, the master plan or the reform policy has been implemented for all public energy enterprises in Thailand, including Petroleum Authority of Thailand (PTT), Electricity Generating of Thailand (EGAT), Metropolitan Electricity Authority (MEA) and Provincial Electricity Authority (PEA), to different degrees and at different levels. As a result, depending on ownership and management, the public enterprise reform results in three major types of the public energy enterprises in Thailand: organization type I - non-transformed or totally state-owned organization, represented by MEA and PEA; organization type II - partially-transformed organization, represented by EGAT; and organization type III - totally-transformed organization, represented by PTT.

The transforming process of the state enterprise reform policy in Thailand has led to a major process change in the enterprises' internal organization, with the objectives of increasing effectiveness, efficiency and shareholder's value. The process requires a sharp change in ownership, strategy, power structures and control of the organization (Johnson *et al.*, 2000). These changes are expected to have a profound

impact, not only on the economic and financial results of the companies, but also on the human factors: individual employees, human resource management practices, and organizational commitment.

As described in the management and behavioral science literature, organizational commitment is considered as a key factor in the relationship between individuals and organizations. Organizational commitment refers to the degree of loyalty shown by employees towards their organization. Employees are regarded as committed to an organization if they willingly continue their association with the organization and devote considerable effort to achieving organizational goals. Higher levels of effort exerted by employees (by greater levels of organizational commitment) lead to higher levels of performance and effectiveness at both the individual and the organizational level (Mowday, 1998). Meyer and Allen (1997), moreover, point out that organizational commitment, if properly managed, could lead to beneficial consequences, such as organizational effectiveness, improved performance, and reduced turnover and absenteeism. This quest to harness potential organizational benefits has resulted in the large number of studies that focus on the nature of organizational commitment.

The reform policy for the energy sector in Thailand also has led to organizational changes in public energy enterprises. According to the literature review, some organizational changes could affect employees' organizational commitment in both positive and negative ways. Major organizational changes include changing HRM practices, change-related behaviors, and work-related values in organizations. This research therefore is oriented toward systematically examining the current internal organizational variables (antecedents) and organizational commitment in three forms of public energy enterprises as shaped by the public reform policy.

## METHODOLOGY

### Sample and data collection

Participants in this research were employed in three public energy enterprises; MEA, EGAT, and PTT. Two major methods, quantitative (survey questionnaire) and qualitative (in-depth interview), were used. Both survey questionnaire data and in-depth interview data were collected during beginning to mid of 2008.

In quantitative approach, a stratified sampling method was employed in order to obtain equal representation of all organizations comprising the samples as well as an appropriate representation of various departments within each organization. Of 589 usable questionnaires (representing a 65.44 percent response rate), 32.94 percent came from employees of totally state-owned enterprises, 34.63 percent came from employees of partially transformed enterprises, and 32.43 percent from employees of totally transformed enterprises. The response rate and details analyses of the demographic variables are provided in Table 1.

The qualitative approach focused on the selected executives who were responsible for policy making and implementation. It was intended to understand and investigate their perception towards the reform scheme. As agreed by the responsible departments, 10 executives (for in-depth interviews) of each organization had been listed. Hence, a total of 30 samples were used in this research.

### Measures

Scales for this research were developed using existing measures. For each measure, scale reliabilities (Cronbach's alpha) were tested. Organizational commitment was measured using 5-point scale of three-component organizational commitment measure scales developed by Meyer and Allen (1997). Cronbach's alpha coefficient of the commitment scale was .81.

**Table 1** Participants and sample descriptive statistics

	Organization Type I	Organization Type II	Organization Type III
No. of participants	194	204	191
Age: mean (SD.)	42.60 (8.06)	45.30 (8.40)	38.99 (8.69)
Gender: Female	57.7%	66.2%	59.2%
Education level:			
High school	0.0%	2.5%	0.0%
College diploma	6.2%	17.6%	0.5%
Bachelor's degree	59.8%	54.9%	20.4%
Higher bachelor	34.0%	25.0%	79.1%
Managerial position:			
Non-management	71.9%	77.0%	71.3%
Middle management	28.1%	21.5%	27.1%
Top management	0.0%	1.5%	1.6%
Work specialization:			
Engineering/sciences	41.4%	23.7%	37.2%
Others	58.6%	76.3%	62.8%
Work experience:			
Less than 1 year	0.5%	2.0%	5.7%
1-5 years	10.8%	5.8%	17.3%
6-10 years	6.2%	7.4%	19.4%
More than 10 years	82.5%	84.8%	57.6%

Change-related behaviors refer to the factors that interact and influence job burnout during the change in the organization. In order to measure the change-related behaviors, the adapted questions of Al-Harran (1996) and the modified Work Stressors Questionnaire used by Bersamin (2005) were applied. The 32 items of the combined questionnaire were rated on 5-point scales of five sub-concepts; reform policy perception, change-related communication, job insecurity, role conflict, and role ambiguity. Cronbach's alpha coefficient of the change-related behavior scale was .80.

Human resource management (HRM) practices refer to specific human resources policies and practices used by management with employees and also refer to the internal environment of the organization that influences employment commitment (effectiveness outcome). In order to measure the HRM practices, three questionnaires were used (Pokerney, 1997; Vandenberg *et al.*, 1999; Boselie

*et al.*, 2001). All three questionnaires, comprising of 45 questions, were rated on 5-point scales of eight dimensions; payment system, employee participation, reward and recognition, power and empowerment, training and development, supervisor effectiveness, work cooperation, and job satisfaction. Cronbach's alpha coefficient of the HRM scale was .95.

In this study, the researcher assumes that transitional culture is represented by the beliefs and values that manifest these values. While employees may differ in terms of their dominant beliefs and values, there are common dimensions according to which work-related values can be addressed. In order to measure the work-related values, the questionnaire developed by Cunha and Cooper (2002) were adapted. The modified questionnaire comprising of 20 items was rated on five-point scales of four dimensions: internal organization, result orientation, employee orientation, and external orientation. Cronbach's alpha coefficient of the work-related value scale was .89.

To accomplish the objectives of the research, statistical methods are employed to analyze data obtained from the questionnaire. The study tests the data to determine the perceived degree of organizational commitment in the public energy enterprises in general and the difference between the non-transformed, partially transformed, and totally transformed organizations. For the purpose of testing hypotheses of the study, the data is primarily analyzed by employing analysis of variance (ANOVA), structural equation model (SEM), and other appropriate statistical approaches.

### Research hypotheses

The main purpose of this study is to examine organizational commitment in different types (structures) of transformed public enterprises under the State Enterprise Reform policy, whilst controlling for the energy industry. Hence, the hypotheses developed primarily entail comparisons of organizational commitment and commitment

antecedents between structural types of the transformed organization. Finally, nine hypotheses were tested in this study.

## RESULTS AND DISCUSSION

The study on the perceptions of Thai public energy enterprise employees regarding the presence of attributes of organizational commitment evidenced significant results. The findings of the study revealed that the totally state-owned public enterprise has mean scores which demonstrated less emphasis on affective commitment and normative commitment compared to partially transformed and totally transformed public enterprises, whereas their mean scores on continuance commitment were not different in these enterprises. These findings partially confirmed the hypotheses of the study, which were consistent with the literature. Table 2 summarizes the research hypotheses formulated and the findings with regard to the hypotheses of the study.

**Table 2** Summary of findings

Item	Hypothesis statements	Finding
H <sub>1</sub>	Employees' affective commitment mean of organization type I is lower than that of organization type II and employees' affective commitment mean of organization type II is lower than that of organization type III.	Accepted
H <sub>2</sub>	Employees' continuance commitment mean of organization type I is lower than that of organization type II and employees' continuance commitment mean of organization type II is lower than that of organization type III.	Rejected
H <sub>3</sub>	Employees' normative commitment mean of organization type I is lower than that of organization type II and employees' normative commitment mean of organization type II is lower than that of organization type III.	Partially accepted
H <sub>4</sub>	Levels of change-related behaviors differ among all types of the public energy organizations as perceived by their employees.	Partially accepted
H <sub>5</sub>	Levels of human resources management practices differ among all types of the public energy organizations as perceived by their employees.	Partially accepted
H <sub>6</sub>	Levels of work-related values differ among all types of the public energy organizations as perceived by their employees.	Partially accepted
H <sub>7</sub>	Change-related behavior factors directly influences employees' organizational commitment to the public energy enterprises in Thailand.	Accepted
H <sub>8</sub>	HRM practice factors directly influences employees' organizational commitment to the public energy enterprises in Thailand.	Accepted
H <sub>9</sub>	Work-related value factors directly influences employees' organizational commitment of the public energy enterprises in Thailand.	Accepted

It is evidenced that, from the results of hypothesis 1 to 3, the levels of some types of organizational commitment of employees in public energy enterprises are different to a certain extent. The level of employees' affective commitment and normative commitment in the totally transformed public enterprise is higher than that of partially transformed and non-transformed public enterprises. Nevertheless, the differences of the level of employees' continuance commitment in all public organizations were not statistically significant. In addition, the analysis of variance results suggested that when demographic variables accounted for the covariates, organization type effects for affective and normative commitments remain strong. The first and significant observation drawn from the results of this study is that there is a significant difference in the level of some attributes of organizational commitment between three types of public energy enterprises. The lack of a structural type difference holds for only continuance commitment.

Since implementing a public reform policy can result in several forms of partial- or full-privatized organization, it leads to the question of whether organization structure matters to performance and commitment. According to Lawler and Yoon (1996), the degree of interaction between parties (groups of employee) to exchange in organizations influences the relational cohesion and organizational commitment of each party. If structuring depersonalized the exchange, commitment should fall. Although there is evidence that bureaucratic structuring increases commitment in voluntary associations (Knoke, 1990), the results of this study have partly supported the previous studies (e.g., Fiorito *et al.*, 2007), that bureaucratic structuring is negatively related to organizational commitment.

The results of the findings for the fourth confirmed that the transformed organization had higher mean scores in the employees' perceptions of the reform policy and change-related communications in their organization than both partially transformed and non-transformed organizations. Employees in

the transformed public enterprise have been found to have favorable attitudes toward the implementation of the State Enterprise Reform. According to in-depth interviews with executives who are responsible for policy making and implementation, the transformed organization prioritizes the importance of communication as well as implements these communications effectively at all levels in their organization. Effective communications on changes would also improve their management and organizational practices.

The findings for the fifth hypothesis revealed that the employees' perceived most of the human resource management practices at different levels in the three public energy enterprises. Statistically significant differences were found between three types of public energy enterprises in five HRM practices, including the payment system, reward and recognition, supervisor effectiveness, training and development, and employee participation. Those in the transformed organizations - both partially and totally - had higher mean scores than those in the non-transformed organization for the above-mentioned factors. Moreover, it can be observed that the employee participation mean score in the totally transformed public enterprise was the highest.

With the sixth hypothesis, the reform policy induces a change in work-related values due to the new objectives and management practices and the need to increase efficiency and effectiveness. In fact, from the four work-related value dimensions that were measured in this research, two of them were strengthened: performance oriented and external oriented values. The transformed organization seems to develop 'stronger' values and focuses on creating not only better individual accountability and inter-organizational communication and co-ordination, but also an increased concern for team spirit and for human resources and their development (Cunha and Cooper, 2002).

The results of hypothesis 7 indicated a moderate negative coefficient of -.49, estimation of the structural equation model at a statistically

significant level greater than .10. These findings suggest that when change-related behaviors are present in the workplace, employees' organizational commitment decreases. These change-related behaviors were proved to have a negative impact on organizational commitment, as hypothesized. This negative relationship is consistent with the findings of Lopopolo (2002), Bersamin (2005), and Kalyal (2007).

At the estimation of the structural equation model at a statistically significant level greater than .10, the finding for the eighth hypothesis revealed a moderate positive coefficient of .46. The results suggest that when human resource management practices are present in the workplace, employees' organizational commitment increases. Hence, the HRM practices were predicted to have a positive impact on organizational commitment. The results of this study support the previous empirical evidence (Fiorito *et al.*, 2007).

Lastly, the results for the ninth hypothesis showed a highly positive coefficient of .63, at a statistically significant level greater than .05. The findings suggest that when work-related values are present in the workplace, employees' organizational commitment would highly increase. As the work-related values were predicted to have a positive impact on organizational commitment, the results of this study therefore support the previous research of Cunha and Cooper (2002) and Kathrins (2007).

## CONCLUSION

This exploratory and empirical research examines the impacts of the public enterprise reform policy on the organizational commitment of the public energy enterprises in Thailand as perceived and viewed by their employees. This research is also aims at identifying the organizational commitment antecedents (factors) that impede the employees' commitments of these organizations as well as eliciting causal relationships between the antecedents and the organizational commitment.

Empirical evidence appears to support the view that **change-related behaviors, human resource management practices, and work-related values** can influence the development of organizational commitment, especially affective and normative commitment. Organizations that require their employees to develop organizational commitment should **provide a supportive work environment**, which create a mutual benefit environment. The practical implications are that organizations should create specific commitment cultures by **providing effective communications, extensive training and development, market-related compensations and incentives**.

In addition, the results suggest some remarkable managerial implications for each type of the reformed state enterprises. Successful reformed organization depends largely on **competitive environments, leaders' initiatives, and supports from the government**. Without such supports, public officials might have difficulty implementing specific measures, i.e., a marketable payment system, equitable rewards, effective leadership, extensive training and development, employee participation, effective communications, etc. - that encourage employee commitment. After implementing the reform policy, political supports should be ongoing and evolving in order to be certain that specific measures are implemented continuously by the public organizations. Nonetheless, some public enterprises may require partially-owned form. This structure is advantageous in terms of improving the values of the public organizations by applying private management practices and in terms of being under government control to implement development policies. Finally, the public enterprise not targeted for the reform should consider restructuring. Restructuring organizational practices and management procedures should be conducive to organizational commitment, hence efficiency and effectiveness.

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