

# Customer Satisfaction and Loyalty in the Choice of Electric Power Suppliers in Japan

## Background

7 years have passed now in Japan since the partial liberalization of the electricity retail market, and with regard to the purchase of power there have been numerous reports, chiefly involving government, local municipalities, supermarkets, etc., of competitive bidding and examples of suppliers being changed. The marketing strategies of power companies are apt to focus on customers who are proactive on changing the company from which they purchase power as well as on short-term price competition. For this reason, there is concern that customers who have built a relationship of trust with power companies and who have no intention of changing suppliers, i.e. highly "loyal" customers, may lower their evaluation of non-price factors, resulting in a failure of strategy. Power companies must have an accurate grasp of customer needs, and must put the right measures into action that raise the corresponding level of satisfaction and loyalty.

## Objectives

The purpose of this investigation was to determine the status of the responses to liberalization and the satisfaction levels and needs of domestic customers on a variety of contract types. Furthermore, by focusing on customers' behavior of change with regard to power suppliers, in addition to quantitatively measuring reactions to price-lowering as well as the value of non-price factors, this study attempts to clarify the structure of loyalty and conditions necessary to improve it.

## Principal Results

A questionnaire survey was conducted concerning electric power service in November 2005. The targets of the survey were residential and business customers. There were 4,647 responses. Through an analysis based on the survey results, the following insights were gained:

1. With respect to the "overall power supplier", 56% of residential, 55% of low voltage, 58% of high voltage, and 59% of ultra-high voltage customers responded that they were satisfied. While all categories of customers indicated a high level of satisfaction with regard to "power reliability", as it stands there is a low level of satisfaction with regard to "price". Concerning "customer services", partially due to the low levels of awareness of such, figures were fairly low, with 38% for residential, 33% for low voltage, 42% for high voltage, and 51% for ultra-high voltage customers (Fig.1).
2. With regard to the levels of awareness of liberalization, residential and low voltage customers were below 20%, while in contrast the level of awareness of liberalization was 45% for high voltage and 62% for ultra-high voltage customers. In addition, all customer categories indicated that liberalization would have a positive effect in the future, and this ratio tended to increase with ultra-high and high voltage customers. Under a scenario in which customers could change the company from which they purchase their power, at a 10% reduction in price the estimated ratios were: 19.3% for residential, 20.8% for low voltage, 32.2% for high voltage, and 37.5% for ultra-high voltage customers (Fig.2). In order to quantitatively evaluate the non-price factors corresponding to these price differences, calculations were made with consideration to the "customer value coefficient", which comprises customer service and corporate image, and as a result it was found that low voltage and residential customers showed relatively high values (Fig.3).
3. Under liberalization, rather than desiring to "change power companies immediately" or to "actively seek out suppliers to change to", it was determined that the loyalty of a customer towards a power company is higher the stronger their desire is "not to change power companies under any conditions" or "to most likely not change." Rather than "overall power supplier", this loyalty consists of customer evaluations of "attributes", "price", and "customer services", and it became clear that there is also a close relationship with the "customer value coefficient" mentioned above (Fig.4).
4. Factor analysis of loyalty was performed taking into consideration customer contract type and needs. The analysis showed, for example, that for high voltage customers "information pamphlets and mail from power companies" and "providing various rates and payment methods" were high priority services, while for ultra-high voltage customers "seasonal and time-of-day discount rates" and other such services held high priority. For residential customers who have high needs for contact with power companies and price related services, it was found that "ads and commercials", "account manager", etc., were important services, while "TV and radio program sponsorship", etc. formed important services for residential customers with high needs for general customer services (Tab. 1). It was therefore determined that in the customer loyalty structure of power companies, in addition to the cost of electric bills and differences depending on contract type, response through segmentation that reflects needs on the part of customers would be the most preferable.

## Future Development

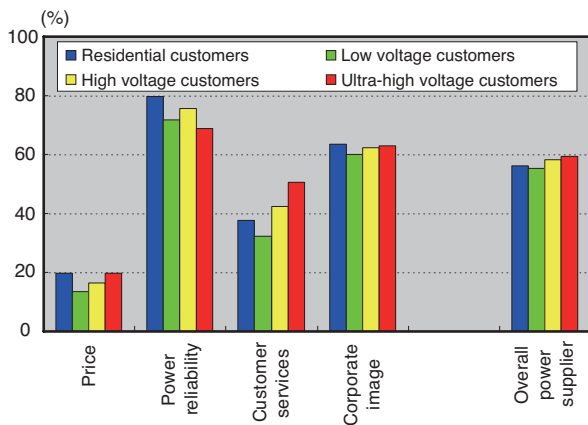
Based on the questionnaire data referred to in the present study, the influence of power reliability as seen from the customer perspective will be quantitatively evaluated. Furthermore, the scope of the survey will be expanded to include parts of Europe, which is more advanced in terms of liberalization, and analyses will be conducted of correlations among the behavior of customers selecting suppliers, satisfaction, and loyalty.

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## Reference

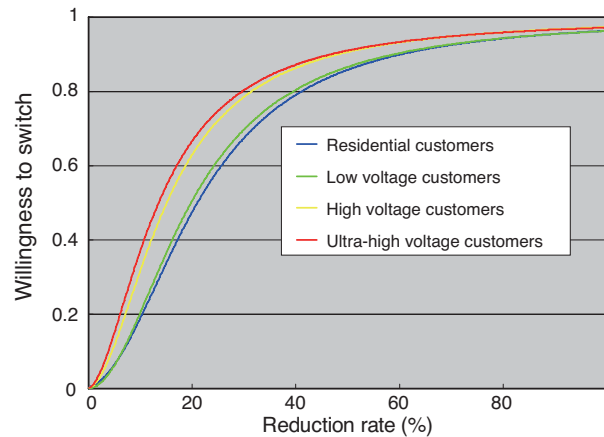
T. Ariu and H. Goto, 2006, "Customer Satisfaction and Loyalty on the Choice of Electric Power Suppliers in Japan", CRIEPI Report Y05017 (in Japanese)

# 1. Socio-economy - Support for management strategies

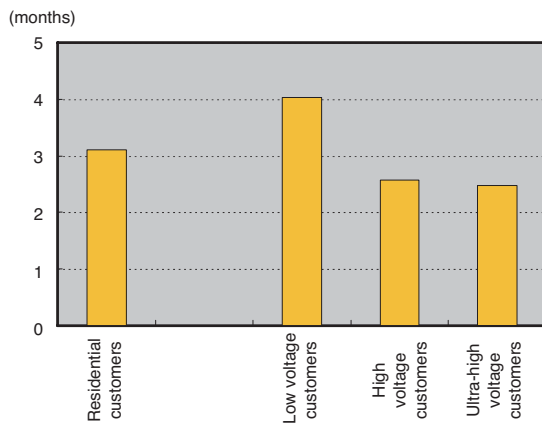


(Note) "Very satisfied" + "somewhat satisfied"

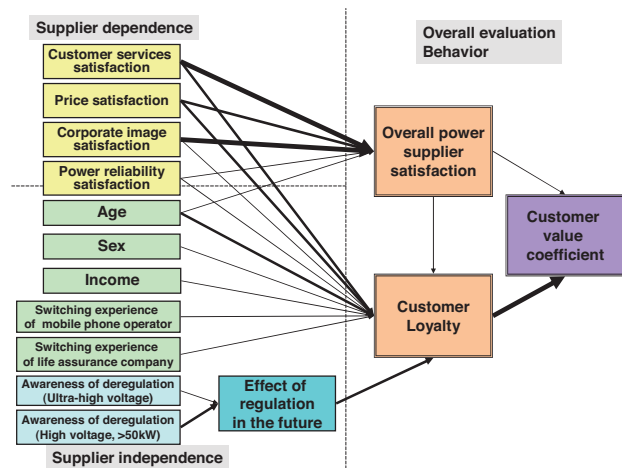
**Fig.1** Customer satisfaction of electric power suppliers



**Fig.2** Cumulative density curve of reduction rate



**Fig.3** Customer value coefficient by electricity contract type



**Fig.4** Path diagram about loyalty and satisfaction

**Table 1** Improvement strategies of customer loyalty for four segments

	Residential customers	Low voltage customers
1	Account manager	Information pamphlets and mail from power companies
2	Ads and commercials	Ads and commercials
3	Ease of understanding the meter/electricity bills	Prompt notification about power failures and accidents
4	TV and radio program sponsorship	Nearby sales and branch office
5	Information pamphlets and mail from power companies	Providing various rates and payment methods
	High voltage customers	Ultra-high voltage customers
1	Information pamphlets and mail from power companies	Seasonal and time-of-day discount rates
2	Providing various rates and payment methods	Support for local activities in the community
3	TV and radio program sponsorship	Providing various rates and payment methods
4	Ease of understanding the meter/electricity bills	Advise on environmental countermeasures
5	Cutting down greenhouse gas	Account manager

(Note) Top 5 factors for improving customer royalty