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Next issue: 20 October 1998

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## Swiss Strategy & Relative Value

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- Less than 100 days to the euro: start with a rate cut?
- The hedge fund blues – crash and credit crunch fears intensify
- Strategy update: flight into safe-haven bonds to continue
- Primary market dormant, spreads widening
- Credit aspects: Japanese electric power companies

## Credit aspects: Japanese electric power companies

Kurt Hess (+41 1 333 24 15)

*In connection with the turbulence surrounding the financial markets, the yield spreads on bond issues of Japanese electricity suppliers have widened sharply. Although the companies concerned are public corporations, the strategic roles they play in providing energy for the country – together with the advantageous regulatory environment – point to minimal credit risk only with regard to specific firms according to our view.*

**Regional monopolies dominate the Japanese electricity market**

The electricity market in Japan is dominated by 10 regional companies, which comprise 99% of the production and distribution of electricity. The table below displays the key data of these particular companies (excluding the small Okinawa Electric Power). What is significant is the relative size of the companies, each one a quasi-monopoly, supplying electricity to their respective regions. Tokyo Electric Power (TEPCO) is the second-largest electricity producer worldwide after Electricité de France (EDF). Many of these companies alone generate more power than all Swiss power plants combined.

COMPANY	Sales volume (TWh 96)	% of total	Nuclear power %	Rating Moody's	S&P outlook	Gross debt (JPY bn)	Debt/Market cap
Tokyo El. Power	257.4	33.5%	26%	Aaa (*-)	AA stable	10'566	3.1x
Kansai El. Power	136.4	17.7%	26%	Aaa (*-)	N.R.	4'487	2.1x
Chubu El. Power	115.6	15.0%	13%	Aaa (*-)	AA stable	4'394	3.0x
Kyushu El. Power	69.0	9.0%	22%	Aa1	N.R.	2'786	3.0x
Tohoku El. Power	66.1	8.6%	9%	Aa1	N.R.	2'675	2.7x
Chugoku El. Power	50.8	6.6%	9%	Aa1	AA- stable	2'213	3.2x
Hokkaido El. Power	25.8	3.4%	19%	Aa1	N.R.	900	2.1x
Hokuriku El. Power	24.2	3.1%	13%	Aa1	N.R.	1'055	2.6x
Shikoku El. Power	23.3	3.0%	29%	Aa1	AA- stable	873	1.7x
Total	768.6	100.0%	22%			29'947	
EDF	355.2		ca. 75%	Aaa	AAA stable		
Total Swiss power plants	48.7		ca. 40%	--	--		

(\*-)On watch list for possible downgrade (country rating Japan)

N.R.: not rated

Source: Bloomberg, Tokyo Electric Power: TEPCO Illustrated 1997

**Strategic significance, highly regulated activities**

In Japan, electricity is produced primarily from thermal sources of energy, (fossil, nuclear) which must be almost entirely imported. For this reason the electric power industry is of special strategic significance for the Japanese economy. Despite being public corporations with private shareholders, (listed in section 1 of the Tokyo stock exchange) the electrical companies are substantially influenced by the Ministry of International Trade and Industry (MITI) concerning day-to-day operating decisions. The MITI approves capital expenditures and

supports the construction of facilities with sizable loans from the Japan Development Bank. In addition, prices are determined by the government using a “cost-plus” basis, hence fluctuations in fuel costs (oil, gas, uranium) can effectively be passed on to consumers.

**Market liberalization  
with limited  
structural effects.**

Japan has also taken initial steps towards liberalization of its energy markets: commercial customers have the possibility to choose their prospective suppliers, and independent producers are able to sell freely. For the time being there are no foreseeable material effects on the credit quality of the group of electric power companies, based on the following reasons:

1. The fact that Japan is an island prevents it from doing business with neighboring countries (e.g. Korea, China) in the energy field. This is in stark contrast to the situation for example in the Swiss energy market.
2. The density of the population as well as the difficulty in procuring fuels (most must be imported) tends to hinder the build up of capacity by independent producers to any large extent. The input of electricity from the heating process into the network will remain limited to industrial operations. The cost/production structure of the leading companies is similar, thereby restricting further the competitiveness among the public utilities.
3. There is no breakup of the group of electric companies planned or so-called “unbundling” foreseen (in the areas of production, transmission, distribution). The typical advantages that monopolies enjoy in the areas of transmission and distribution will, in any event, remain in place.

**Minimal operating  
risk compensates  
for weak  
capitalization**

By international standards all the companies are weak in the area of market capitalization, which means for example, rising finance costs would cause considerable harm. According to our valuation – shared by Moody’s and S & P – this weakness is offset by the advantageous regulatory environment and the minimal operating risk. Therefore the credit ratings by both agencies are pegged at a level not far below that of the country rating for Japan. Since, in our view, the specific debt risk of these issuers is marginal, the yields on CHF bonds should not be more than around 20 basis points above Japanese government-backed debt issues, especially with regard to the large issuers (TEPCO, Kansai, Chubu).

**Limited liquidity**

Liquidity in the Swiss franc market is limited for Japanese power utility issuers. The only bond where we have seen some activity is the 4 1/4% Kyushu Electric Power 2002, which is offered at 105.75 to yield 50 basis points over the swap level.

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## Fixed Income Research Team Zurich

Dr. Theresia Tolxdorff	<b>Swiss Equity &amp; Fixed Income Research</b>	+41 1 333 52 15
Misha Weber	<b>Credit Research</b>	+41 1 333 67 10
Kurt Hess	Credit analyst	+41 1 333 24 15
Peter Jeggli	Credit analyst	+41 1 333 66 20
Dr. Beat Schwab	<b>Fixed Income Trading Research</b>	+41 1 333 66 47
Adam Beaudin	Fixed income trading and forex analyst	+41 1 333 59 14
Christoph Fehr	Fixed income trading analyst	+41 1 333 34 62
Daniel Gerber	Technical analyst	+41 1 333 77 08
	<b>Credit Suisse Economic Research</b>	
Thomas Heller	Economist	+41 1 333 66 56

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