

Calculation of Fuel Cost Adjusted Unit Price and Electricity Rates for July 2013

1. Average Fuel Price Calculation

- ① Calculate a 3-month average fuel prices by fuel types (crude oil, LNG, and coal).
- ② Calculate average fuel price using above three figures and conversion factor.
(trade statistics prices published by Ministry of Finance Japan)

	Jan. - Mar. 2012 (Rate Revision)	Jan. - Mar. 2013 (for Jun. 2013)	Feb. - Apr. 2013 (for July 2013)			
			Average	Feb. 2013	Mar. 2013	Apr. 2013
Crude Oil (JPY/kl)	57,802	64,981	66,888	65,159	68,422	67,120
LNG (JPY/ t)	67,548	77,799	80,780	79,765	80,222	82,477
Coal (JPY/ t)	11,452	10,836	11,041	10,912	11,126	11,088
				(fixed)	(fixed)	(flash)
Average Fuel Price(JPY/kl)	44,200	50,000				
	(basic fuel price)					

< Conversion Factor >
Crude Oil Conversion Factor
× Caloric Component Ratio

Crude Oil Price	66,888 JPY/kl	×	0.1970	(α)
LNG Price	80,780 JPY/ t	×	0.4435	(β)
Coal Price	11,041 JPY/ t	×	0.2512	(γ)
+)				
↓(Maximum unit: 100 JPY) Rounded off to nearest 10				
Average Fuel Price	51,800 JPY/kl			(compared with the previous period: +1,800Y/kl)

2. Fuel Cost Adjusted Unit Price Calculation (Low-Voltage Supply)

$$\begin{aligned}
 \text{Fuel Cost Adjusted Unit Price} &= (\text{Average Fuel Price} - \text{Basic Fuel Price}) \times \frac{\text{Basic Unit Price}}{1,000} \\
 &= (51,800 \text{ JPY/kl} - 44,200 \text{ JPY/kl}) \times \frac{0.222 \text{ JPY/kWh}}{1,000} \\
 &= 1.6872 \text{ JPY/kWh} \\
 &\quad \downarrow \text{(rounded off to the hundredth)} \\
 &= \boxed{1.69 \text{ JPY/kWh}}
 \end{aligned}$$

3. Electricity Rates Calculation for July 2013 (averaged model)

The fuel cost adjusted price, which is the fuel cost adjusted unit price multiplied by consumption, is added to calculate the electricity rate.

In case of 30A meter-rate lighting B and 290kWh of electricity consumption per month.
A reduction by automatic bank transfer discount included.

Demand Charge	+	Energy Charge 18.89 JPY/kWh × 120 kWh 25.19 JPY/kWh × 170 kWh + Fuel Cost Adjustment Fuel Cost Adjusted Unit Price × Consumption 1.69 JPY/kWh × 290 kWh	+	Renewable Energy Promotion Surcharge	+	Solar Surcharge	-	Account Transfer Discount
819.00 JPY				101 JPY		14 JPY		53 JPY
= 7,920 JPY/kl								

* tax included