

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

1. Average Fuel Price Calculation

Calculate a 3-month average fuel prices by fuel types (crude oil, LNG, and coal).

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)	Mar - May 2013 (for Aug 2013)	Apr - Jun 2013 (for September 2013)			
			Average	Apr 2013	May 2013	Jun 2013
Crude Oil (JPY/kl)	57,802	67,390	66,534	67,134	66,572	65,740
LNG (JPY/ t)	67,548	82,499	83,938	82,477	85,267	84,211
Coal (JPY/ t)	11,452	11,177	11,125	11,093	11,307	10,970

Average Fuel Price(JPY/kl)	44,200	52,700		(fixed)	(fixed)	(flash)
	(basic fuel price)					

Crude Oil Price	66,534 JPY/kl	×	0.1970 (α)
LNG Price	83,938 JPY/ t	×	0.4435 (β)
Coal Price	11,125 JPY/ t	×	0.2512 (γ)
+ )			
↓(Maximum unit: 100 JPY) Rounded off to nearest 10			
<b>Average Fuel Price</b>	<b>53,100 JPY/kl</b>		(compared with the previous period: +400Y/kl)

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

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

$$\begin{aligned}
 \text{Fuel Cost Adjusted Unit Price} &= ( \text{Average Fuel Price} - \text{Basic Fuel Price} ) \times \frac{\text{Basic Unit Price}}{1,000} \\
 &= ( 53,100 \text{ JPY/kl} - 44,200 \text{ JPY/kl} ) \times \frac{0.222 \text{ JPY/kWh}}{1,000} \\
 &= 1.9758 \text{ JPY/kWh} \\
 &\downarrow \text{ ( rounded off to the hundredth ) } \\
 &= \boxed{1.98 \text{ JPY/kWh}}
 \end{aligned}$$

3. Electricity Rates Calculation for September 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	Renewable Energy Promotion Surcharge	Solar Surcharge	Account Transfer Discount
819.00 JPY	18.89 JPY/kWh × 120 kWh 25.19 JPY/kWh × 170 kWh + Fuel Cost Adjustment Fuel Cost Adjusted Unit Price × Consumption 1.98 JPY/kWh × 290 kWh	101 JPY	14 JPY	- 53 JPY
= 8,004 JPY/kl				

\* tax included

END