

Calculation of Fuel Cost Adjusted Unit Price and Electricity Rates for January 2014

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)	Jul - Sep 2013 (for Dec 2013)	Aug - Oct 2013 (for January 2014)			
			Average	Aug 2013	Sep 2013	Oct 2013
Crude Oil (JPY/kl)	57,802	66,766	68,454	66,350	69,002	70,133
LNG (JPY/ t)	67,548	80,284	78,062	79,361	77,324	77,457
Coal (JPY/ t)	11,452	10,608	10,413	10,447	10,662	10,144
Average Fuel Price(JPY/kl)	44,200	51,400		(fixed)	(fixed)	(flash)

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

Crude Oil Price	68,454 JPY/kl	×	0.1970	(α)
LNG Price	78,062 JPY/ t	×	0.4435	(β)
Coal Price	10,413 JPY/ t	×	0.2512	(γ)
+)				
↓(Maximum unit: 100 JPY) Rounded off to nearest 10				
Average Fuel Price	50,700 JPY/kl	(compared with the previous period: -700Y/kl)		

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

$$\begin{aligned}
 \text{Fuel Cost Adjusted Unit Price} &= \left(\text{Average Fuel Price} - \text{Basic Fuel Price} \right) \times \frac{\text{Basic Unit Price}}{1,000} \\
 &= \left(50,700 \text{ JPY/kl} - 44,200 \text{ JPY/kl} \right) \times \frac{0.222 \text{ JPY/kWh}}{1,000} \\
 &= 1.4430 \text{ JPY/kWh} \\
 &\quad \downarrow \text{(rounded off to the hundredth)} \\
 &= \boxed{1.44 \text{ JPY/kWh}}
 \end{aligned}$$

3. Electricity Rates Calculation for January 2014 (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 1.44 JPY/kWh × 290 kWh	+	Renewable Energy Promotion Surcharge 101 JPY	+	Solar Surcharge 14 JPY	-	Account Transfer Discount 53 JPY	
819.00 JPY									= 7,847 JPY/kl

* tax included