

Calculation of Fuel Cost Adjusted Unit Price and Electricity Rates for May 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)	Nov2013 - Jan 2014 (for Apr 2014)	Dec 2013 - Feb 2014 (for May 2014)			
			Average	Dec 2013	Jan 2014	Feb 2014
Crude Oil (JPY/kl)	57,802	72,153	72,768	71,940	74,630	71,694
LNG (JPY/ t)	67,548	85,373	88,103	85,277	90,049	89,026
Coal (JPY/ t)	11,452	10,682	10,851	10,801	10,900	10,850
Average Fuel Price(JPY/kl)	44,200	54,800		(fixed)	(fixed)	(flash)
(basic fuel price)			< Conversion Factor > Crude Oil Conversion Factor × Caloric Component Ratio			
Crude Oil Price	72,768	JPY/kl	×	0.1970	(α)	
LNG Price	88,103	JPY/ t	×	0.4435	(β)	
Coal Price	10,851	JPY/ t	×	0.2512	(γ)	
+)			(Maximum unit: 100 JPY) Rounded off to nearest 10			
Average Fuel Price			56,100 JPY/kl (compared with the previous period: +1,300Y/kl)			

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

$$\begin{aligned}
 \text{Fuel Cost Adjusted Unit Price} &= \left(\frac{\text{Average Fuel Price}}{10} - \frac{\text{Basic Fuel Price}}{10} \right) \times \frac{\text{Basic Unit Price}}{10} \\
 &= \left(\frac{56,100 \text{ JPY/kWh}}{10} - \frac{44,200 \text{ JPY/kWh}}{10} \right) \times \frac{0.228 \text{ JPY/kWh}}{10} \\
 &= 2.7132 \text{ JPY/kWh} \\
 &\downarrow \text{(rounded off to the hundredth)} \\
 &= 2.71 \text{ JPY/kWh}
 \end{aligned}$$

3. Electricity Rates Calculation for May 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	+	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border: 1px solid black; padding: 2px;">Energy</td> <td style="padding: 2px;">×</td> <td style="padding: 2px;">Consumption</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px;">19.43 JPY/kWh</td> <td style="padding: 2px;">×</td> <td style="padding: 2px;">120kWh</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px;">25.91 JPY/kWh</td> <td style="padding: 2px;">×</td> <td style="padding: 2px;">170kWh</td> </tr> <tr> <td colspan="3" style="text-align: center; padding: 2px;">+</td> </tr> <tr> <td colspan="3" style="text-align: center; padding: 2px;">Fuel Cost Adjustment</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px;">Fuel Cost Adjusted Unit Price</td> <td style="padding: 2px;">×</td> <td style="padding: 2px;">Consumption</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px;">2.71 JPY/kWh</td> <td style="padding: 2px;">×</td> <td style="padding: 2px;">290kWh</td> </tr> </table>	Energy	×	Consumption	19.43 JPY/kWh	×	120kWh	25.91 JPY/kWh	×	170kWh	+			Fuel Cost Adjustment			Fuel Cost Adjusted Unit Price	×	Consumption	2.71 JPY/kWh	×	290kWh	+	Renewable Energy Promotion Surcharge	+	Solar Surcharge	-	Account Transfer Discount
Energy	×	Consumption																											
19.43 JPY/kWh	×	120kWh																											
25.91 JPY/kWh	×	170kWh																											
+																													
Fuel Cost Adjustment																													
Fuel Cost Adjusted Unit Price	×	Consumption																											
2.71 JPY/kWh	×	290kWh																											
842.40 JPY				217 JPY		14 JPY		54 JPY																					
= 8,541 JPY/kl																													

* Tax included

* Renewable Energy Power Promotion Surcharge are calculated by "Renewable Energy Power Promotion Surcharge Unit Price (May 2014 - April 2015: 0.75yen/kWh).