



**هيئة تنظيم الكهرباء - عمان**  
AUTHORITY FOR ELECTRICITY REGULATION, OMAN

# Cost Reflective Tariff

for Large  
Government, Commercial  
and Industrial Customers

## Customer Guide

**Version 2**



## **Introduction**

On September 2016, the Council of Ministers had approved the introduction Cost of Reflective Tariff (CRT) for large Government, Commercial and Industrial customers who consume more than 150,000 kilowatt hours (kWh) per year.

In accordance with the provisions of the Sector Law, this Cost Reflective Tariff (CRT) is designed to more accurately reflect the actual costs of providing a supply of electricity to large Government, Commercial and Industrial customers.

Ministerial decision No. 2016/3 issued by the Public Authority for Electricity and Water on 29 December 2016 specified the component of the Cost Reflective Tariff, which includes production cost, transmission cost, distribution and supply cost. According to the latter decision, the Cost Reflective Tariff was applied with effect from 1 January 2017 to all eligible customers.

This Guide describes the key features of CRT tariff arrangements for large Government, Commercial and Industrial customers and is designed to help those affected to better understand the new arrangements.

It is important to recognize that, in common with best practice internationally, CRT tariff incorporates variable seasonal and, at times, daily prices. CRT tariff structure also includes a combination of various types of tariffs, including energy (RO/MWh), demand (RO/MW) and standing (RO/customer account) charges. Each customer's bill will reflect their unique pattern of consumption and the demands that they make on the electricity production, transmission, distribution and supply system.

As CRT tariff is designed to reflect the full costs of supplying electricity, without Government subsidy, it is likely that some customers will receive bills that are higher than those they previously paid. Bills may also be higher if large amounts of electricity are consumed in the peak summer periods.

Overall, it is expected that the new arrangements will provide customers with with incentives to more carefully manage their consumption through energy efficiency measures and by shifting as much consumption as possible away from peak periods.



## Key features

As described above, CRT tariff is designed to reflect the actual costs of supplying electricity. As with many other industrial sectors these are:

1

**production costs (these are recovered through the “Bulk Supply Tariff”)**

2

**transport costs (we separate this into the high voltage national transmission networks and the low voltage local distribution networks ) and**

3

**retail costs (this is usually referred to as supply).**



## Production

In Oman, as elsewhere, production of sufficient electricity to meet the nation's demand is arranged through contracts with power production facilities (typically gas burning power generating stations and potentially, in the future, renewables capacity).

The costs of meeting Oman's electricity demand vary according to how much production capacity must run at any one time. These variable costs are reflected in CRT tariff through an element known as BST (Bulk Supply tariff).

The BST comprises of a schedule of charges (in RO/MWh) that vary by hour, day and month to reflect the cost of production at various periods. Bulk Supplies made to customers connected to the main interconnected system (MIS) i.e. those supplied by Muscat Electricity Distribution Company, Majan Electricity Company or Mazoon Electricity Company shall be charged in four rate bands, based on the day of the week and the time of day that electricity is consumed.

This also includes all Rural Areas Electricity Company (Tanweer) customers except customers based in Dhofar. The rate bands are defined in Table 1 below:

**Table 1 :** Bulk Supply Tariff Rate Bands- MIS\*

<b>Rate Band</b>	<b>Time Peiod</b>	<b>Days of week</b>
Off-Peak	02:00 to 11:59 and 16:00 to 21:59	All days
Night-Peak	22:00 to 01:59 (following day)	All days
Weekday Day-Peak	12:00 to 15:59	Sunday to Thursday
Weekend Day-Peak	12:00 to 15:59	Friday & Saturday

The rates (in Rial Omani per MWh) applicable for Bulk Supplies in each rate band during each month during 2020 shall be as set out in Table 2 below:

**Table 2 :** 2020 Bulk Supply Tariff - MIS (RO/MWh)\*

	<b>Off-Peak</b>	<b>Night-Peak</b>	<b>Weekday Day-Peak</b>	<b>Weekend Day-Peak</b>
<b>January – March</b>	12	12	12	12
<b>April</b>	14	14	14	14
<b>May – July</b>	17	26	67	37
<b>August - September</b>	17	24	28	22
<b>October</b>	14	14	14	14
<b>November – December</b>	12	12	12	12

\*Source of Tables 1 & 2: Oman Power & Water Procurement Company 2020 Electricity Bulk Supply Tariff Leaflet

For large customers connected to Dhofar power system and Rural Areas Electricity Company (Tanweer) customers based in Dhofar, the charges are slightly different, reflecting differences in underlying demand. Bulk Supplies made for those customers shall be charged in six rate bands, based on the day of the week and the time of day that electricity is taken. The rate bands are defined in Table 3 below:

**Table 3 :** Bulk Supply Tariff Rate Bands- Dhofar Power System\*

<b>Rate Band</b>	<b>Time Period</b>	<b>Days of Week</b>
Night-Peak Weekday	00:00 to 02:59 and 20:00 to 23:59	Sunday to Thursday
Night-Peak Weekend	00:00 to 02:59 and 20:00 to 23:59	Friday & Saturday
Off-Peak Morning	03:00 to 09:59	All days
Day-Peak Weekday	10:00 to 15:59	Sunday to Thursday
Day-Peak Weekend	10:00 to 15:59	Friday & Saturday
Off-Peak Afternoon	16:00 to 19:59	All days,

The rates (in Rial Omani per MWh) applicable for Bulk Supplies in each rate band during each month during 2020 shall be as set out in Table 4 below.

**Table 4 :** 2020 Bulk Supply Tariff- Dhofar Power System (RO/MWh)\*

	<b>Night-Peak</b>		<b>Off-Peak Morning</b>	<b>Day-Peak</b>		<b>Off-Peak Afternoon</b>
	<b>Weekday</b>	<b>Weekend</b>	<b>All Days</b>	<b>Weekday</b>	<b>Weekend</b>	<b>All Days</b>
<b>January – March</b>	12	12	12	12	12	12
<b>April</b>	32	23	18	23	18	18
<b>May – June</b>	48	32	27	45	25	26
<b>July – August</b>	16	14	13	13	13	13
<b>September– October</b>	20	16	14	16	16	16
<b>November – December</b>	12	12	12	12	12	12

\*Source of Tables 3 & 4: Oman Power & Water Procurement Company 2020 Electricity Bulk Supply Tariff Leaflet

Charges for subsequent calendar years will be revised based upon changes in underlying production costs and will be published for the next calendar year ahead on AER website in a revised CRT Statement of charges each November.

Where required, new metering arrangements will be implemented in order to ensure that consumption in each charging period can be accurately measured. If necessary your electricity supplier will be in touch with you about this.

Electricity transmission and distribution systems lose a certain amount of the electrical energy input to the system in the process of transmitting and distributing that energy to customers (known as technical losses). These will be recovered through the transmission (T,) and distribution(D,) charges described below.

These arrangements provide large Government, Commercial and Industrial customers with incentives to more carefully manage their consumption through energy efficiency measures and, in particular, to limit their consumption during peak periods of the year and during peak hours of the day.



## ***Transmission***

The costs of the high voltage electricity transmission networks largely reflect the size (capacity) of the transmission system. Large Government, Industrial and Commercial customers will therefore be charged on the basis of the demands they place on the capacity of the system, which equates to their contribution to overall system demand.

This will be measured based on customers' contribution to the transmission network's average system peak also known as Maximum Transmission System Demand ("MTSD"). MTSD is calculated as an average across three snapshots during which total system demand is at its highest (with the three snapshots at least 21 days apart).

**Average MTSD=**

$$\frac{\text{snapshot 1} + \text{snapshot 2} + \text{snapshot 3}}{3}$$

The transmission use of system charge ( $T_t$ ) is applied to customers' average consumption over the three MTSD snapshot hours and does not therefore necessarily coincide with each customer's peak demand. New metering arrangements will ensure this can be accurately measured for each affected customer if the customer's existing metering arrangements cannot accurately record hourly consumption.

For newly connected customers appropriate metering must be paid by the customer and you should discuss such arrangements with your local distribution company at the time of requesting a supply.

These costs are reflected in the new cost-reflective tariff through transmission use of system charges ( $T_t$ ).

The level of charge for the  $T_t$  element in 2020 will be RO 15,900 per megawatt (MW) and applies equally to customers throughout the country. This will be recalculated each year based on the allowed revenues of the Oman Electricity Transmission Company (OETC) system and published in November of each year for the calendar year ahead in the revised CRT Statement of Charges.

Although the charge represents the average consumption over three peak hours of system consumption (which is likely to be in May, June or July for both the MIS and the Dhofar transmission system) the charge will be recovered in monthly bills and will not simply be added to the bill for the months in which the system peak demand occurs.

As system peak demand can only be known after the event the following method will be applied in order to recover the  $T_t$  element from large Government, Commercial and Industrial customers.

- **each customer's consumption over three peak hours of system demand (at least 21 days gap between each peak) will be estimated on the basis of previous consumption records;**

- the total estimated charge for each customer will be divided by 12 and a monthly charge included on each bill; and
- after peak system demand for the year is known, the  $T_1$  element will be recalculated to reflect actual consumption at that time and future bills adjusted accordingly.

These arrangements provide large Government, Commercial and Industrial customers with incentives to carefully manage their consumption during peak periods.



## ***Distribution***

Distribution costs reflect the cost of carrying out any works, extension, reinforcement of distribution systems, or provision, installation, maintenance, repair or disconnection of electricity lines, electric plants or meters.

These costs are reflected in the cost-reflective tariff through distribution use of system charges ( $D_1$ ).

Customers are charged distribution charges based on each respective network level they are connected; Oman network levels comprise of the following:

- **Network level 1 at 33 kV**
- **Network level 2 at 11 kV**
- **Network level 3 at 0.415 kV**



The applicable distribution charges are as follows:

<b>Customer Group</b>	<b>Energy Charges (RO/MWh)</b>
<b>Network user level 1 33KV</b>	<b>4 RO/MWh</b>
<b>Network user level 2 11KV</b>	<b>5 RO/MWh</b>
<b>Network user level 3 0.415KV</b>	<b>9 RO/MWh</b>

This will be recalculated each year based on the average of the allowed revenues of Muscat Electricity Distribution Company, Majan Electricity Company, Mazoon Electricity Company and Dhofar Power Company and will be published in November of each year for the calendar year ahead in the revised CRT Statement of Charges. Even though it is calculated on the basis of the allowed revenues of Muscat, Majan, Mazoon and Dhofar it will be applied equally to all distribution connected customers in Oman, including customers of the Rural Areas Electricity Company (Tanweer).

Customers directly connected to the transmission network (at 132kV) will not be required to pay distribution system charges.



## **Supply**

Supply costs reflect the costs of retail operations, including meter reading, billing, cash collection, query management and customer communications. As such costs do not vary significantly on the basis of consumption they will be calculated on an averaged basis.

These costs are reflected in the cost-reflective tariff through supply charges ( $S_i$ ).

The charge for the  $S_i$  element for 2020 will be RO 50.000 per customer per year and will be recovered in equal monthly instalments.

This will be calculated each year based on the average of the allowed revenues of Muscat Electricity Distribution Company, Majan Electricity Company, Mazoon Electricity Company and Dhofar Power Company and will be published in November of each year for the calendar year ahead in the revised CRT Statement of Charges. Even though it is calculated on the basis of the allowed revenues of Muscat, Majan, Mazoon and Dhofar Power Company it will be applied equally to all connected customers in Oman.



## Summary

The cost reflective tariff for large Government, Commercial and Industrial customers is therefore made up of four elements and is calculated as:

$$\text{Cost Reflective Tariff} = \text{BST}_i + T_i + D_i + S_i$$

This applies to all qualifying customers with the exception of those connected to the transmission system at a voltage of 132kV, who are not required to pay charges for use of the distribution network ( $D_i$ ).

<b>CRT component</b>	<b>Charge</b>	<b>Type of Charge</b>	<b>Calculation of charge</b>
<b>BST<sub>i</sub></b>	See Table 2 and Table 4	Energy	Applied to hourly MW consumption
<b>T<sub>i</sub></b>	15,900 RO/MW	Demand	Charge per annum applied to customer's contribution to average system peak
<b>D<sub>i</sub></b>	Network level 33KV 4.0 RO/MWh  Network level 11KV 5.0 RO/MWh  Network level 0.415KV 9.0 RO/MWh	Energy	Applied to each MWh consumption based on customers' connection to each respective distribution voltage level
<b>S<sub>i</sub></b>	50 RO/customer	Standing	Charge per account per annum for administering each customer account



## Typical questions and answers

Q

**How do I know if I will be charged the cost reflective tariff?**

Your electricity supply company should contact you to let you know that on the basis of past consumption records the CRT will apply to you as soon as your connection to the network has been made.

Q

**I am a newly connected customer and it is not clear that my consumption will be greater than 150,000kWh per year, what will happen?**

Your local electricity distribution company should carry out an assessment of your expected electricity demand and provide an indication of the tariff that it would be expected to apply (for the first three years following connection) together with its offer to provide you with a connection to its distribution network. However, if your consumption is estimated to be less than 150,000 kWh per year and you then use more than 150,000 kWh per year the company is under an obligation to charge you on the basis of CRT.

Q

**How will my consumption during peak periods be measured?**

All customers eligible for CRT will have appropriate metering installed by their local electricity distribution company, if such metering is not already installed. They will contact you soon in order to arrange this, but you may also wish to contact them if you have specific concerns in relation to the timing of the new meter installation. The new meters will be installed at the distribution company's expense.

For newly connected customers appropriate metering must be paid for by the customer and you should discuss such arrangements with your local distribution company at the time of requesting a supply.



**Q**

**What if I have a number different meters or accounts at my premises?**

Consumption at all accounts at the same premises (covered by a single krookie/mulkiyah) will be aggregated to determine if the supply to the premises is eligible for CRT, except where supplies are for non-CRT eligible purposes, such as residential use.

All CRT eligible supplies at the same premises, no matter how many meters are installed at the premises, will be charged at CRT rates, providing the 150,000kWh per year threshold is exceeded.

If any meters need to be replaced in order to support the calculation of CRT this will be done at the distribution company's expense.

**Q**

**What if I own a number of different premises?**

Eligibility for CRT depends only upon consumption at each individual premises and consumption at different premises will not be aggregated.

**Q**

**I am a residential customer who consumes more than 150,000 kWh, will CRT apply to me?**

No.

**Q**

**Are there plans to include residential customers in CRT in the future?**

The Authority has no plans to extend CRT to residential customers. Decisions to extend CRT or to introduce revised tariffs for non-CRT eligible customers, can only be taken by the Council of Ministers.



Q

### **How do I calculate what my monthly bill will be?**

The information set out above should enable you to calculate your estimated annual and monthly bills, providing you have information about your historic consumption. You will however have to make some assumptions about your consumption during peak hours of the day, compared with off-peak periods, especially if most of the electricity at your premises is consumed by air conditioning equipment.

In subsequent years you will be able to develop a more accurate model of your consumption based on analysis of your consumption during previous year, when your supply will start to be measured by a meter that can measure consumption on an hourly basis. You will be provided with consumption information by your supplier in order to help you with this.

Q

### **When will the CRT be published?**

The Authority will publish CRT Statement of Charges in November of each year that will include all the components ( $BST_t$ ,  $T_t$ ,  $D_t$  and  $S_t$ ) of the Cost Reflective Tariff applicable from the following year.

Q

### **How can I determine what measures I should take to reduce my electricity bills?**

The measures that you should best take to reduce your electricity bills will depend upon the nature of your electricity consumption and upon your plans for the future. For each individual customer this will be different.

The Authority would advise you to think very carefully about your consumption and to assess which energy efficiency measures you might take to reduce your consumption, especially during peak periods.



Q

**I am a tenant of a large building that qualifies for the CRT but my own consumption is quite low, what will happen to me?**

Your supply is through a direct connection to the local electricity distribution network you will not be eligible for CRT if your annual consumption is less than 150,000 kWh.

If your meter does not have a direct connection and you are supplied through a secondary meter connected to a commercial landlord's meter, that is itself connected direct to the electricity distribution network and the commercial landlord supplies services to you, such as a central air conditioning system, CRT charges will normally apply to the electricity supplied through your meter.

If you need further information on the status of your supply or your applicable tariff you should contact your electricity distribution company for advice. There are a number of arrangements in Oman that do not follow these straightforward rules, but if you pay your electricity bills to your landlord and not to your local supplier it would appear likely that you do not have a direct connection. It is likely therefore that the supply from your landlord will reflect CRT rates.

Q

**How would I know to which distribution network level I am connected to?**

Your local electricity distribution company should be able to let you know to which network level you are connected to.



## How to Contact

We hope that you have found the information in this booklet useful. As the Authority responsible for regulating the electricity sector, we constantly strives to ensure that customer receive a high level of service from the electricity supplier.

If you require further information about the matters described in this guide, please contact your electricity distribution and supply company using the following contact details:

- **Mazoon Electricity Company S.A.O.C**  
8007-7771  
<http://www.mzec.nama.om>
  
- **Majan Electricity Company S.A.O.C**  
8007-8000  
<http://www.majanco.co.om>
  
- **Muscat Electricity Distribution Company S.A.O.C**  
8007-0008  
<http://www.medcoman.com>
  
- **Dhofar Power Company S.A.O.C**  
8007-7700  
[www.dpcoman.com](http://www.dpcoman.com)
  
- **Rural Areas Electricity Company (Tanweer) S.A.O.C**  
8007-7787  
<http://tanweer.om>

If you are still unsure about what to do you may contact us for advice and support at: 24609700. Or if you wish to send us an e-mail please direct it to: [customeraffairs@aer.om](mailto:customeraffairs@aer.om)