Notification

Jaipur, 30 March, 2007.

No.RERC/Secy./Reg. 68 In exercise of powers conferred by Section 42 read with Section 181 of the Electricity Act 2003 (Act 36 of 2003) and enabling powers, after previous publication, the Rajasthan Electricity Regulatory Commission hereby makes the following Regulations, namely:-

1. Short title & commencement:

   These regulations will be called the Rajasthan Electricity Regulatory Commission (Terms & Conditions for Open Access) (4th Amendment) Regulations, 2007 and will come into force from the date of their publication in the official gazette.

2. In regulation 20 following new sub-regulations will be added:

(5) The energy accounting for billing of open access consumer with contract demand of 5MVA and above shall be carried out as per above provisions for injection schedule, actual injection, drawal schedule and actual drawal as per meter readings for each time block of 15 minutes. Provided that energy accounting and billing effected prior to publication of this notification, as per Commission's orders shall be considered as effected under these provisions.

(6) The energy accounting for billing of open access consumers with contract demand below 5 MVA, shall be based on 'interface meters with ToD facility' as per the mechanism indicated at Appendix-I.

Provided that open access consumer with contract demand of 5MVA and above can opt for energy accounting by the mechanism as provided at Appendix-I after giving 15 days notice to licensee. Such energy accounting will be effective after the installation of requisite meter within notice period.

(7) Time zones for 'ToD metering' can be altered by the distribution licensee after notifying the same two weeks in advance.

(R. K. Sharma)
Secretary.

Energy Accounting Mechanism for Open Access Consumers

1. Settlement Period:

Weekly meter readings shall be taken for energy injection at injection end and energy drawal at drawal end during specified time zones. Weekly meter readings shall also be taken for maximum demand of injection and drawal at respective ends. Time zone & their duration shall be the same for injection end and drawal end. Based on -

   (i)   Weekly injection/drawal of energy during each time zone as per meter readings and
   (ii) Recorded maximum demand, on 15 minutes or 30 minutes basis, as the case may be, for the week

   the energy injection/drawal shall be converted into constant injection/drawal of
   two time blocks during each time Zone as under.

2. Injection end:

2.1 Let,

n = number of time zones in a day

E_m = energy injection during the time zone, in kWh

H_m = Duration(in hours) of the time zone

MD_i = recorded maximum demand for the week in kW

Am_i = Average demand of energy injection during the time zone in kW (E_m/H_m)

MAX_i = maximum of average demand of energy injection, in kW i.e. Maximum of ($Am_{i1}, Am_{i2}, ... Am_{in}$)

df_i = demand factor during maximum injection time zone (in per unit (p.u.)) = (MAX_i/MD_i).

2.2   Injection during each time zone shall be split into two time blocks, one of peak drawal for 20% duration of each time zone and other of lower drawal for 80% duration of each time zone as under:

Particulars	Time block 1 (TB1) (20% peak time block)	Time block 2 (TB2) (80% lower than peak time block)
(i) Duration, hours	$0.2 \times H_m$	$0.8 \times H_m$
(ii) Energy injection,kwh	$E_m \times 0.2/df_i$	$E_m \times (df_i-0.2)/df_i$
(iii)Demand of injection, kW	$E_m \times 0.2/(df_i)/(H_m \times 0.2)$ $= Am_i/df_i$	$E_m \times (df_i-0.2)/(df_i \times H_m \times 0.8)$ $= 1.25\, Am_i(df_i-0.2)/df_i$

2.3   In case of supply to number of open access consumers & discom, energy & demand for each time block shall be allocated to each open access consumer & discom as per priority assigned in schedule & where priority is the same, then in proportion to average schedule of drawal of open access consumers, during each time block to determine available injection (for energy and demand) to open access consumers & discom. Scheduling shall be as per Grid Code.

2.4   The available injection, so determined, for open access consumer shall be checked vis-à-vis transmission and/ or distribution capacity reservation. Any injection in excess of transmission and/ or distribution capacity reservation, shall be disallowed and available energy & demand during that time block, shall be reduced by such excess. Reduction in available energy shall be equal to excess demand (in kw) multiplied by duration. Such excess injection shall be inadvertent supply to discom.

3. Entitlement:

The available injection in energy & demand, corrected as above, shall be reduced by transmission and/ or distribution losses to determine entitled energy and demand.

   Entitled energy = available energy (1-losses(in pu))
   Entitled demand = available demand (1-losses(in pu))

4. Open access drawal:

4.1. Energy drawal as per meter readings at drawal end during each zone shall be split into two time blocks of peak drawal & lower than peak drawal duration, following the procedure at 2.1 & 2.2, as under:

Let,

Dm= Actual energy drawal during the time zone.

MDd= recorded maximum demand of drawa for the week.

Amd= Average demand of actual energy drawal during the time zone (Dm/Hm)

$MAXd$= maximum of average demand of actual energy drawal in kW i.e. maximum of ($Amd1, Amd2,............,Amdn$)

dfd= demand factor during maximum drawal time zone (in per unit (p.u.))=($MAXd/MDd$)

Particulars	Time block 1 (TB1) (20% peak time block)	Time block 2 (TB2) (80% lower than peak time block)
(i) Duration, hours	0.2xHm	0.8xHm
(ii)Energy drawal, kWh	0.2xDm/dfd	Dm x(dfd-0.2)/dfd
(iii)Demand of drawal, kW	Amd/dfd	1.25xAmdx(dfd-.2)/dfd

4.2. The open access drawal shall be lesser of entitled energy (vide 3) and energy drawal (vide 4.1) during each time block.

4.3. Entitled energy (vide 3) in excess of energy drawal (vide 4.1) in each time block shall be inadvertent supply to discom.

4.4. Actual energy drawal in excess of entitled energy during each time block shall be the supply by discom. Maximum demand of drawal from discom during each time block shall be excess energy drawal divided by the time block duration.

4.5. In case maximum drawal demand from discom exceeds regular H.T. supply contract demand during any time block and there is shut down of the power plant, then excess drawal shall be stand by supply with its demand equal to such excess demand and energy drawal as equal to excess demand multiplied by duration of time block. Only balance shall be considered as regular supply demand and drawal. Stand by supply shall be billed on daily basis based on notice of commencement & restoration of shutdowns verified through load survey data or any other records.

4.6. Maximum demand for drawals during the week, for regular and stand-by supply shall be the maximum of the demand so worked out for each time block. Energy drawal during the week for open access, regular and stand –by supply shall be the sum of the respective energy drawal during each time block.

4.7. For the purpose of weekly billing, monthly rate shall be converted to weekly rate by multiplying it by the ratio of 12 (Number of months in a year)/ 52 (Number of weeks in a year) i.e. 3/ 13.