Comments on MoP's Draft Amendment to the Gazette Notification on Renewable Consumption Obligation (RCO) notified on 20th Oct, 2023

Prayas (Energy Group), 18th April, 2025

The Ministry of Power (MoP) has issued a draft amendment to RCO notification, issued on 20th Oct, 2023 and has invited comments by 18th April 2025. We have some suggestions and comments on the same, which are detailed below:

1. Definition of total electricity consumption by designated consumers (DCs)

While the amendment clarifies the total electricity consumption for DCs which are either captive or open access consumers, the amendment is silent with regard to consumption by DISCOMs. There is a lot of complexity in case of consideration of electricity consumption for DISCOMs. We would like to explain this through an illustration given below:

Particular	Unit	Quantum
Total procurement by DISCOM	MU	1000
out of which		
procurement within state	MU	500
procurement from outside state	MU	500
Inter-state transmission losses (ISTS losses)	%	3
Intra-state transmission losses (InSTS losses)	%	5
Distribution network losses	%	10
Electricity available at state periphery		
Procurement within state	MU	500
Procurement from outside state	MU	485
Total electricity available for consumption at state periphery	MU	985
Considering InSTS losses, total electricity available for consumption	MU	936
Considering distribution network losses, total electricity available for consumption	MU	842

As can be seen from the above table, the electricity available at state periphery (meaning excluding only ISTS losses) and that after considering intra-state T&D losses are very different. ISTS losses are excluded only from the procurement made from outside the state (i.e., using ISTS network).

Particular	Unit	Quantum
Total RE procurement by DISCOM	MU	500
out of which		
procurement within state	MU	200
procurement from outside state	MU	300
Inter-state transmission losses (ISTS losses)	%	3
RE procurement at state periphery		
Procurement within state	MU	200
Procurement from outside state	MU	291
Total RE procurement at state periphery	MU	491

We have only excluded ISTS losses from RE procurement. This is done to ensure that the procurement is also considered at state periphery only.

Now, as can be seen from the table below, the RPO compliance can vary from ~50% in case only ISTS losses are excluded from consumption to ~58% when even T&D losses are excluded. Thus, a clear definition of total electricity consumption shall have to be provided in the notification.

Consumption parameter	Total consumption	RE Procurement	RPO compliance (%)
At state periphery	985	491	49.80%
Considering InSTS losses as well	936	491	52.50%
Considering Distribution network losses as well	842	491	58.30%

We have come across very different definitions of this term for the purpose of RPO compliance under the existing RPO regulations of various states. For example,

i. MERC defines RPO as a percentage of total procurement as measured at the at G-T interface.
ii. DERC considers total consumption. As per its 2021 regulations, it was defined as 'total energy sold to consumers / excluding Transmission & Distribution Loss after subtracting the Hydro Power purchase during the year (not excluding the LHPs considered)'. As per the 2023 amendment, for Distribution Licensees it is - Total Sale of Power to its Retail Consumers.
iii. TGERC & HERC consider total consumption excl. Hydro and RE.

Thus, for DISCOMs **we suggest that the total electricity consumption is considered at state periphery, i.e., only after excluding ISTS losses from the total procurement.**

2. Exemption for waste heat recovery for CPP

The draft amendment suggests that:

> *"5. For captive users notified as designated consumers, electricity consumption obligations shall include self-consumption excluding auxiliary consumption. Further, the consumption obligations shall exclude electricity generated and self-consumed from waste heat recovery process using fossil-based sources, except for electricity generated from a Waste Heat Recovery Steam Generator (WHRSG) in a captive Combined Cycle Gas-Based Generating Station."*

Energy conservation Act 2001 empowers central government to specify minimum share of consumption of non-fossil sources by designated consumers as energy or feedstock under Section 14(x). The amendment is considering exempting electricity consumption from Waste Heat Recovery (except from HRSG in combined cycle CPPs) from RCO targets. This has created significant confusion over process-based heat recovery and steam-based heat recovery and applicability of this exemption to various sectors and various technology combinations in various sectors like fertilizers, iron & steel, cement etc., with each sector arguing for exemptions and exceptions. Such energy efficiency measures like waste heat recovery are already being captured under PAT scheme as a measure of energy conservation.

For CPP, consumption could be defined as the total consumption (*excluding auxiliary consumption*) from non-DISCOM sources irrespective of the source. Further, the APTEL in its recent judgements (based on the EA, 2003 and state regulations) have made it very clear that fossil fuel based co-generation and WHR are not exempt from RPO targets. **A standardised definition of consumption across SERCs is certainly needed to avoid confusion and legal challenges in the future. In our view, the definition of consumption, esp. for CPP should be as simple as possible with no exemptions.**

3. Buyout Price

The draft amendment to the Oct, 2023 notification has proposed the following,

"6. The specified renewable energy consumption obligations may be fulfilled through one or more of the following methods:

i. Consumption of non-fossil-based electricity, either directly or through an energy storage system;

ii. Purchase of Renewable Energy Certificates (RECs) issued in accordance with regulations notified by the Central Electricity Regulatory Commission (CERC);

iii. Payment of the buyout price specified by Central Electricity Regulatory Commission (CERC).

*Provided that the sums received through the buyout mechanism shall be credited to the **Central Energy Conservation Fund** under a separate head. These sums shall be utilized to support the development of specified non-fossil fuel capacities, with the objective of increasing the share of non-fossil fuel energy in the overall energy mix. The Central Government shall specify the mechanism for utilizing these sums to support the development of such non-fossil fuel capacities".*

There are several issues with the proposed amendment, esp. 6 (iii), i.e. 'buyout price' which is a new way to meet RCO and this is certain to lead to a lot of legal and jurisdictional complications between the Centre and States. We highlight few concerns with this option.

- **'Payment of the buyout price'** is essentially akin to a penalty by a different name since this mechanism does not translate to any actual RE capacity addition in the country. Neither does it have any equivalent RE generation similar to the REC mechanism.
- More importantly, there is **no mention of CERC at all in EC Act 2001**. As there is no defined function or role of CERC, under which section of EC Act can CERC come up a regulatory framework for the buyout price? Thus, allowing this through an amendment to the Oct, 2023 Notification should be reconsidered considering the likely legal challenges.
- The Act provides adjudication power to SERCs under section 26(3), which empower them to levy penalty in case of non-compliance. However, through buyout mechanism, which is essentially a form of penalty, this **role of SERC is being undermined**.
- The buyout price is presently not defined, however if it is defined in terms of an absolute value in Rs/kWh, it will **strongly further depress the REC market if the buy-out price is low**.
- Finally, there is **no sun-set clause for the buyout price proposal**. In case it is allowed without any sunset date, the mechanism will hamper prospects of meeting the 500 GW RE goal by 2030 and any future RE targets envisaged by the Central government.

Unfortunately, the reality of RPO non-compliance penalties levied by SERCs in the past is not encouraging. Despite the new RCO targets being announced in Oct 2023 with the likelihood of much higher penalties (upper limit of Rs 3.72/kWh), all 35.73 million RECs traded in the calendar year 2024 and the first three months of calendar year 2025 were at a price lower than Rs 500/REC, i.e. below Rs 0.5/kWh. Despite the FY 25 ending, with high RCO non-compliance expected, there remain 40.5 million RECs unsold in the market. **This underscores the lack of seriousness in the entire RPO-RCO mechanism.** If obligated entities or designated consumers have not rushed in to buy RECs, when available at such low prices, **they are unlikely to step up to pay the buyout price when the reality of SERCs non-compliance penalties has been practically non-existent.**

Instead of the proposed Buyout Price suggested in the amendment which would be decided by CERC, we propose this alternative.

Relax penalty (**Modified Buyout**) for FY 25 & FY 26 subject to strict pre-conditionalities

a. RE & Storage project gestation period is around 1.5-2 years. As a one-time measure, MoP/BEE could consider reducing the penalty for RPO non-compliance for FY 24-25 and FY 25-26 for those DISCOMs who demonstrate adequate RE capacity tied up in the form of **signed PPAs** (at the time of RCO compliance checking/auditing) for the requisite RE demand (with RCO of 35.95 %) for the year FY 26-27. If DISCOMs can reliably demonstrate this to SERCs/BEE/MoP, MoP should consider reducing the penalty for the first two years for the non-compliance in these years to 10% of the upper cap of the penalty, i.e. 2 times the mtoe price (Rs 3.72/kWh). This would be ~ Rs 0.37/kWh. MoP would need to build a strong consensus among States and SERCs for this will not be possible unless most States agree for a uniform approach for non-compliance.

   This is similar to the 'buyout price' proposed. However, we suggest that such a reduced penalty should be allowed only subject to the following conditions, namely

   1. DCs demonstrate adequate RE capacity tied up in the form of **signed PPAs** (at the time of RCO compliance checking/auditing) for the requisite RE demand (with RCO of 35.95 %) for the year FY 26-27.
   2. DCs should be eligible for this **reduced penalty option if and only if all RECs have been exhausted from the system**. There are presently **40.5** million RECs available in the market, as mentioned above. All of these could potentially be purchased since the shortage of RE for FY 25 is very likely to be over 100 BU.
   3. The buy-out price option should be available for a limited period with a **sunset clause** and hence only for non-compliance for FY 25 and FY 26.
   4. The actual buyout price – could be linked to the REC trading price, **such that it is 10-20% higher than the average/highest REC price for the year** for which compliance is being assessed. This could be notified as the minimum buy-out price by the BEE/MoP. If the buyout price is lower than the REC traded price, that will spell doom for the existing REC market and its investments.
   5. Given that CERC is not mentioned in the EC Act at all, it would be more appropriate if the SERCs, through consensus decide on the uniform buyout price or else it could also be suggested by BEE to SERCs. SERCs can validate the above conditionalities as part of the compliance checking process and then announce the buyout price. SERCs have discretion to levy it upto 2X the prescribed mtoe price under EC Act. This is also as per EC Act where SERCs are required to 'adjudicate' (meaning assess the nature of violation and levy penalty accordingly) based on rules set by MoP.
   6. All requisite data as per formats specified by BEE in the rules/guidelines is submitted by DCs within the stipulated timeline.

b. For those obligated entities which cannot reliably demonstrate adequate signed RE PPAs (at the time of RCO compliance checking/auditing), the penalty should be much higher than the buy-out price, say 2X the buyout price. Since the buy-out price is lower form of penalty for a limited time period, a higher non-compliance penalty should be levied for RCO compliance of FY 26-27 and onwards. DISCOMs could also consider requesting NTPC or SECI or any other central RE implementing agency (REIA) to procure adequate RE on their behalf if they are unable to do the necessary tendering/bidding process on their own.

Finally, *6 (ii.) Purchase of Renewable Energy Certificates (RECs) issued in accordance with regulations notified by the Central Electricity Regulatory Commission (CERC)* should be slightly amended to

*6 (ii.) ~~**Purchase of**~~ Renewable Energy Certificates (RECs) issued in accordance with regulations notified by the Central Electricity Regulatory Commission (CERC).*

This would acknowledge the retaining the RECs by generators and not be limited to purchase.

4. Penalty provisions

a. Clarity on non-compliance of notification

The draft amendment provides that

> *"6 (B). In case of a non-compliance of this notification including but not limited to shortfall in meeting Renewable Energy consumption obligations, non-submission of required information, or submission of incorrect information, the Bureau, the State Designated Agency, or any other person designated by the State Government, may file an application before the Adjudicating Officer, for imposing penalty, under the provisions of Section 26 and 27 of the Act."*

The provision is not clear with respect to when non-submission of required information will be considered. The notification does not mention the timelines for data submission by DCs to BEE. Further, there is a possibility of delay in submitting the data from the prescribed timelines, which should ideally also be penalised.

Thus, the amended notification or the soon to be released guidelines should clearly specify data submission formats along with strict timelines. Delayed submission, non-submission or submission of incorrect information should all be penalised.

b. Suo Motu process for checking non-compliance by the State Commission

Even if there is no petition from *the Bureau, the State Designated Agency, or any other person designated by the State Government*, the state commission shall be empowered to take suo-motu cognizance of the matter and initiate proceeding for compliance verification and penalty imposition, if needed. This will increase accountability of DCs. Thus, a proviso maybe added to 6(B) thus,

> *"Provided that the State Commission may through its suo-motu powers also initiate proceeding for compliance verification and penalty imposition under the provisions of Section 26 and 27 of the Act."*

c. Clarity on fund creation and management

While SERCs are empowered to adjudicate RCO non-compliance, the Act is silent on where such non-compliance penalties would be deposited (in a State or Central Fund?), who will manage these funds and how these funds should be utilised. The draft amendment to the Oct 2023 notification is also silent on this aspect. This aspect needs to be clarified either through an amendment to the EC Act or through the amended notification to avoid further legal and other complications between the Centre and the States.

5. Aggregated Compliance

The amendment allows aggregated compliance for multiple DCs through clause 6(C), which is as follows:

> "*6 (C). Compliance for multiple designated consumers under common control, as defined in the Companies Act, 2013, may be considered on an* ***aggregate basis at the Holding Company level****."*

The proposal for allowing RCO compliance at the Holding Company level across sectors (like cement, steel, DISCOMs etc.) is innovative and could significantly reduce transaction costs for DCs and may also lower the cost of reducing emissions since the cheapest sectors for emissions reduction could be targeted with priority. However, this could create quite a few operational complexities which need to be addressed by BEE/MoP.

i. Most States have allowed cumulative RPO compliance for past year shortfalls which need to be complied with in FY 25 or even up to FY 26 or FY 27. Thus, excess or surplus in terms of RCO compliance in one particular year may have to be first used to sure up past RPO shortfalls.
ii. Some states have specific penalties and incentives for shortfalls and surplus in RPO compliance (like MERC). What would happen to such past shortfalls and surplus and their associated penalties and incentives if compliance is assessed across state boundaries.
iii. Further, up to FY 24 (for which most SERCs have not yet notified RPO compliance), the RPO framework under the EA, 2003 is operational while from FY 25 onwards we have the new RCO targets under the EC Act. How would RPO shortages/surpluses from FY 24 or earlier under the EA, 2003 be assessed and handled under the RCO targets for say FY 25 or FY 26 with very different penalty structures.
iv. Finally for Corporate Compliance across states, which ERC would be the appropriate ERC? Will it have to be the CERC and if so, would some legal amendments be needed to operationalise this. If it is not CERC, then states will have to agree to a framework of accounting shortages and surpluses across DCs and on penalties. Further even if the penal amount is agreed upon, the critical question of where this money should be kept and for what purpose should it be used is likely to create legal and other complexities, esp. if multiple state jurisdictions are involved.

This is an innovative proposal with the possibility of significantly reducing transaction costs for large Holding Companies. However, we should proceed with caution and not unless the practical details for operationalization of such a scheme are worked out and agreed by all States.

6. Meeting shortfall in DRE

The draft notification provides provision for use of surplus from the DRE category, however is silent on any other possibility to meet shortfall in the DRE category. Would RECs be allowed to meet DRE shortfall? Using REC for meeting shortfall in this category will defeat the purpose of not allowing any fungibility from other categories with DRE. Apart from this, there is no clear indication on whether such RECs were issued for RE projects with smaller capacity (up to 10 MW). **Hence, the notification should clarify that any shortfall in DRE will lead to RCO non-compliance for DISCOMs and that RECs are not a valid mechanism for meeting DRE targets.**

7. Aspects to be covered under detailed guidelines

We would like to list out some aspects that need to be covered in the detailed guidelines to be issued by BEE, which are as follows:

- Timeline for each category of DCs for data submission and compliance process
- Public process for Compliance verification and penalty imposition
- Public reporting of compliance data by DCs and penalty imposed on them
- Public reporting of penalty fund and its utilization
- Public reporting of status of non-compliance proceeding on DCs in each state for each year (along with name of DCs for which such proceeding is taking place and details of such proceedings like petition no, petition filing date, order date, etc.)

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