

CYPRUS TRANSMISSION SYSTEM OPERATOR



Major Changes between Versions 4.0 and 5.0 of the TSR

Supporting Document to Trading and
Settlement Rules Version 5.0

23 June 2016

The present document is an explanatory report which elaborates on eight major modifications, implemented between the following versions of the Trading and Settlement Rules (TSR)

- Version 4.0, issued for Public Consultation, and
- Version 5.0, issued following the Public Consultation process and presented to the TSR Advisory Committee

The modifications to the TSR draft document were performed either in response to comments received within the scope of the Public Consultation, or on issues identified by the Cyprus Transmission System Operator.

This document was prepared by Correggio Consulting within their requirements for a Contract funded by the EU Commission – Support Group for Cyprus to support the Cyprus Transmission System Operator during the TSR public consultation and TSR Advisory Committee processes.

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1. Section F: Forward Market

In response to various comments received under the public consultation process and with a view to fully implement the rationale of the forward market as provided under the Regulatory Decision 1/2015, Paragraphs 4 and 5 of Section F have been modified extensively. We hereby provide a short description of the major changes introduced:

- The Forward Market is a portfolio market where Producers, RES Producers and RES Aggregators can both sell and buy energy quantities and by D-1 allocate and nominate, among their resources, the net physical delivery quantities. Load Representatives can both buy and sell energy quantities and by D-1 nominate their net physical offtake quantities.
- Registration of physical delivery and physical offtake quantities is allowed until 09:00 of D-1 (i.e. the D-2 deadline for energy quantities registration has been abolished). This change implements the relevant provision of the Regulatory Decision and allows RES Producers and RES Aggregators as well as EAC (representing RES under National Grant Plans-NGPs) better allocation of quantities among the various resources of their forward portfolio.
- An obligation to Load Representatives to submit Physical Offtake Nominations is added. Physical Offtake Nominations, upon confirmation and acceptance, are taken into account in corresponding Participant's Market Schedule. This change has been introduced to allow Load Representatives other than Suppliers to nominate offtakes.
- Participants are notified in real time of their Net Delivery Position upon the acceptance of a Bilateral OTC Contract with matching quantities (notified by both participants).
- Since Participants have real-time information about their Net Delivery Position, the deadline of D-2 16:00 is no longer necessary. The energy quantity nomination and the Physical Delivery/Offtake Nominations are distinct process. Although this arrangement does not follow the letter of the Regulatory Decision 01/2015, it is in full compliance with Decision 01/2015, as both approaches allow energy quantity nominations until 09:00 of D-1. The TSOC believes that the approach followed is simpler both from the TSR and the TSR implementation point of view (MMS).

2. Section G: DAM participation

The previous version of the Trading and Settlement Rules introduced the possibility for Producers to submit, apart from energy offers, and energy bids in the DAM (i.e. to buy energy quantities) with a view to allowing them to cover their auxiliary needs. However, it is not possible to distinguish and restrict corresponding right only to auxiliary quantities, the design had either be expanded to unrestricted quantities (and subsequently to unrestricted participants type) or be restricted as per the Regulatory Decision i.e. to allow submission of energy bids only by Suppliers. The latter option has been introduced to fully comply with the Regulatory Decision which mandates a non-portfolio DAM and submission of Energy Bids by Suppliers only. The term Load Representative is used in Section G has been replaced in all occasions by the term supplier to indicate that Energy Bids are submitted by Suppliers serving end customers.

3. Obligation/ Right for Reserve Offers' Submission

The obligations/rights of generating resources and a dispatchable load to offer for reserves has been corrected and clarified, where appropriate, to describe the following basic principles:

- Producers **are obliged** to submit a separate Reserve Offer for each Generating Unit and for each type of reserve **for the total of the unit's technical capability**.
- In cases of partial no -availability, Producers are obliged to submit offers for reserves for the available levels in accordance with the corresponding partial non-availability declaration. In cases of total non-availability, Producers have the right not to submit offers for reserves.
- RES Producers, RES Aggregators and Load Representatives for dispatchable load **have the right** (but are not obliged) to submit Reserve Offers per type of reserve in accordance with corresponding technical capabilities of their Balancing Service Providers.

4. Obligation/Right for Balancing Energy Offers' Submission

The obligations/rights of generating resources and dispatchable load to offer for balancing energy has been corrected and clarified, where appropriate, to describe the following principles:

- Producers **are obliged to submit upward** Balancing Energy Offers per Generating Unit for quantities equal to the difference between the unit's available capacity and the respective Market Schedule (irrespectively of Market Schedule being technically feasible or not).
- Producers **are obliged to submit downward** Balancing Energy Offers per their Generating Unit for quantities equal to the respective Market Schedule (irrespectively of Market Schedule being technically feasible or not).
- RES Producers and RES Aggregators **have the right to submit upward** Balancing Energy Offers for a maximum quantity which reflects whatever is available according to the Market Schedule and is in parallel technically feasible for corresponding RES unit's upwards capability.
- RES Producers and RES Aggregators **are obliged to submit downward** Balancing Energy Offers per their RES Unit or portfolio of RES Units (provided that they hold corresponding technical capability) for quantities equal to the respective Market Schedule.
- RES Producers **are obliged** to submit upward Balancing Energy Offers in case corresponding mFRR Reserve Offers have been submitted and/or RR Offers have been nominated. The minimum to be offered should respect the corresponding capacity for which reserve offers have been submitted or RR has been nominated.
- Load Representatives representing Dispatchable Loads **have the right** (but are not obliged) to submit upward and downward Balancing Energy Offers in case mFRR Reserve Offers have not been submitted and RR Offers have not been nominated for corresponding Dispatchable Loads. The maximum to be offered (either upwards or downwards) depends on the technical capability of the corresponding Dispatchable Load.
- Load Representatives representing Dispatchable Loads **are obliged** to submit upward and downward Balancing Energy Offers in case corresponding mFRR Reserve Offers have been submitted and/or RR Offers have been nominated. The minimum to be offered should respect the corresponding capacity for which reserve offers have been submitted or RR has been nominated.

The following example is provided to allow for better understanding of what is provided under the TSR, assuming a one hour settlement period:

A Producer having a Generating Unit with maximum capacity 200 MW that has been awarded 20 MW of upwards RR a month ahead for the trading period T of day D and its Market Schedule is 150 MWh for this

specific trading period carries the obligation to submit BE offers as follows:

BE upwards including steps **at least** covering the area between 150 MW and 200 MW.

BE downwards including steps **at least** covering the area between 150 MW and 0 MW.

In parallel, for each type of reserve i.e. for FCR, a FRR and mFRR offers for reserves should be made for the total technical capability of the unit to provide these reserves, irrespectively of the Market Schedule, as the ISP co-optimization starts building stacks of available reserve bands for all types of reserves (including RR) either from the maximum capacity (upwards reserves) or the technical minimum of the unit (downwards reserves).

5. Imbalance Settlement Calculations

A conceptual change has been introduced with regard to Instructed and Uninstructed Imbalance Energy Settlements.

Uninstructed Imbalance Energy is calculated per Balance Responsible Entity (BRE), not per Balance Service Provider (BSP) as this was the case in the previous version. In this context, the type of resources constituting a BRE has been corrected and completed, to cover all possible cases.

Clarifications have been introduced to describe deviations from the Market Schedule as Instructed Imbalances despite the fact that the imbalance energy was not the result of Activated Balancing Energy i.e. as the case is with small Load Representatives and RES Units within respective tolerance limits, energy quantities of Generating Units during the start-up period (between synchronization and Minimum Stable Generation) and when under Automatic Generation Control (AGC). In the updated TSR version, the deviations are qualified instructed imbalances and are settled as such.

Uninstructed Imbalance Energy is calculated as the difference between the metered energy and the market schedule and any Instructed Imbalance Energy. This general approach is followed in all cases and improves clarity.

In this context, paragraphs 4.3 to 4.8 of Section K have been modified extensively in order to adhere with the above conceptual change and by the same time respect the Regulatory Decision which provides for discrete treatment of deviations of RES units and small suppliers.

6. Non-compliance charges

In general, the changes introduced apply Non-compliance charges only to those resources that are non-compliant. In most cases, clarifications have been introduced in the text; in some cases modifications to the equations have been applied.

The following specific changes have been introduced following corresponding comments submitted under the public consultation process:

- The charges for a) non-lawful submission of Energy Offers in the Day-Ahead Market b) non-lawful submission of Non-Availability Declaration and c) non-lawful Techno-Economic Declaration, is modified to clarify that the relevant charge applies only to those generating resources not submitting corresponding DAM offers, Non-Availability Declarations or Techno-Economic Declarations.
- The mathematical formula determining the charge for non-compliance with Ancillary Services Dispatch Instructions by Balancing Service Providers has been modified to clarify that the charge applies only to those resources not providing Balancing Energy, even though remunerated for mFRR and RR and for those quantities that have not been provided (i.e. partial delivery will be penalized for the missing part only).
- Within the charge for a) non-submission of FCR, aFRR and mFRR Offers and b) RR Offers, appropriate corrections have been introduced to clarify that the charge applies only to those generating resources that have an obligation to submit a reserve offer and such obligation has not been met.
- The charge for non-compliance with instructions has been modified to exclude penalties for non-compliance with reactive power obligations as such services should be mandated under the Transmission and Distribution Rules.

7. Section K: Treatment of the amount from non-compliance charges

Section K has been modified to reflect the provisions of the Regulatory Decision with regard to the treatment of the gathered non-compliance charges amount. The Regulatory Decision foresees that the corresponding amount should be directly returned to consumers by reducing the Public Service Obligation costs,

rather than being credited proportionally to all Load Representatives and allowing them to handle it on a competitive basis (Section K, paragraph 9.15.1).

In this context, the wording has been simplified and clarified, to reflect the Market Operator's obligation to transfer the total revenue at the end of each calendar year to the 'Public Service Obligations Uplift Account UA-6 instead of transferring it to the 'Cyprus Transmission System Operator Administrative Expenses Uplift Account UA-7' and from there to Load Representatives, as was the case in the previous version.

8. Section K: Initial and Final Monthly Settlement Statements

Changes in Paragraph 10 of section K have been inserted to clarify that one Settlement Statement is prepared per Participant, irrespective of the various capacities of the Participant (Producer, BRP, Load Representative, etc.) For example, a Participant participating in the market as both Producer and Supplier shall receive only one statement. Thus unnecessary cashflows between different functions of the same commercial entity are avoided. It also becomes clear that security covers reflect the exposure of the commercial entity and not the exposures of each individual capacity.