

RENEWABLE ENERGY AUCTION

2,000 MW

APPLICABLE LEGISLATION

Law 24/2013, of 26 December, of the Electrical Sector

Royal Decree 413/2014, of 6 June, that regulates the activity of electric power production from renewable sources, cogeneration and residues.

Royal Decree 359/2017, of 31 March, that establishes a call for granting the specific retributive regime to new electric production installations from renewable energy sources in mainland Spain electrical system.

Establishes the maximum capacity to be auctioned.

Order ETU/315/2017, of 6 April, that regulates the procedure of allocation of the specific retributive regime in the call for new electric production installations from renewable energy sources, convened under the Royal Decree 359/2017, of 31 March, and approves its retributive parameters.

Establishes the mechanism of allocation of the specific retributive regime and the applicable retributive parameters.

Resolution of 10 April 2017, of the Secretary of State for Energy, that establishes the procedure and rules of the auction for the allocation of the specific retributive regime to new electric production installations from renewable energy sources, convened in accordance with the Royal Decree 359/2017, of 31 March, and in the Order ETU/315/2017, of 6 April.

Resolution rules.

Establishes the auction rules.

Resolution of 10 April 2017, of the Secretary of State for Energy, that convenes the auction for the allocation of the specific retributive regime to new electric production installations from renewable energy sources in accordance with the Order ETU/315/2017, of 6 April.

Resolution call.

Establishes, among other issues, the auction date, the schedule and the capacity to be auctioned.

ORGANIZATION OF THE PRESENTATION

Introduction

- Introduction and General Description.

Auction

- Auction Procedure and Retributive regime.

Registry SRR

- Inscription in the Specific Retributive Regime.

INTRODUCTION AND GENERAL DESCRIPTION

INTRODUCTION AND GENERAL DESCRIPTION

OBJECTIVES

Compliance with the EU 2020 objective: 20% of renewable Energy consumption over final consumption.

Minimizing consumer's costs

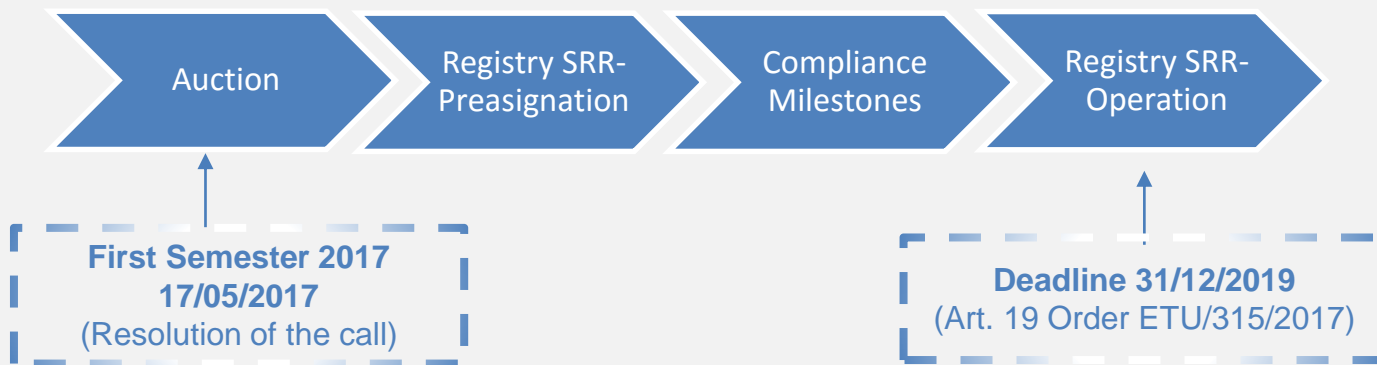
BOOSTING RENEWABLE ENERGY PRODUCTION SECTOR

NEW RENEWABLE ELECTRICITY AUCTION CALL



INTRODUCTION AND GENERAL DESCRIPTION

- The objective is the assignment of the right of perception of the specific retributive regime up to a capacity quota of renewable installations.
- The allocation of this economic right will be decided through an auction mechanism.
- It will be a technology neutral auction (open to all renewable technologies and without established capacity quotas per technology).
- Each individual bid will offer a reduction percentage over the Standard Value of the Initial Investment on the Reference Standard Installation
- The main procedure phases will be:



SCOPE (2^oSection - Royal Decree 359/2017)

- Installations in the Mainland Spain Electrical System.
- Category b installations (article 2 Royal Decree 413/2014 of 6 June): installations that use as primary energy any of the renewable energies:
 - Photovoltaic .
 - Wind.
 - Other renewable technologies.
- Only for new installations:
 - Without definitive exploitation authorization.and
 - Not registered before the 2 April 2017 in the administrative regime of Electrical production installations.

EXCLUSIONS TO THE SCOPE (2º Section Royal Decree 359/2017)

The specific retributive regime cannot be granted to:

- Installations which construction implies the closure or capacity reduction of other installations of the same technology.
- Installations built from main equipment previously used or not brand new.

OTHER EXCLUSIONS TO THE SCOPE (2nd Section Royal Decree 359/2017)

The specific retributive regime cannot be granted to those:

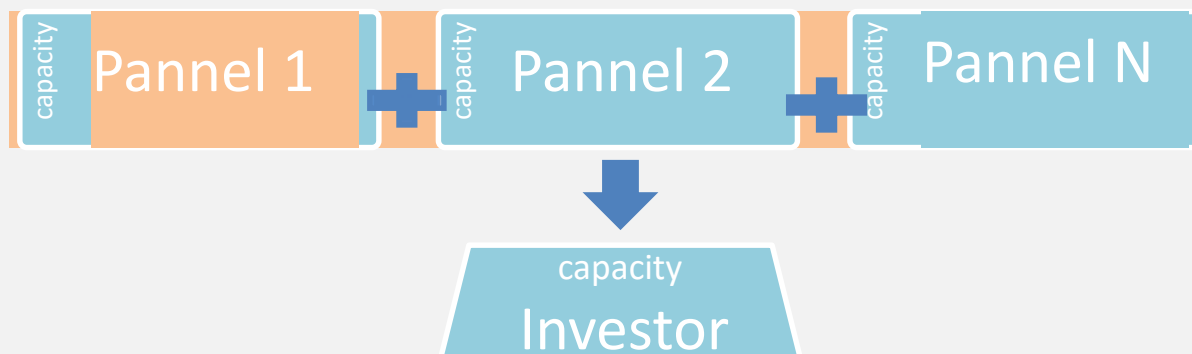
- Considered as companies in difficulty as defined in the EU Guidelines on State Aid for rescuing and restructuring undertakings in difficulty (DO C244, October 2004).
- Undertakings subject to a pending recovery order after a previous Decision from the European Commission that has declared an Aid to the beneficiary illegal and incompatible with the common market.

INSTALLED CAPACITY

- The auction is for installed capacity in accordance with the definition of installed capacity from Article 3 of Royal Decree 413/2014, of 6 June (Call for 2,000 MW)
 - **Installations with equipments in series:** installed capacity will be the minor capacity from that specified in the plate of characteristics



- **Photovoltaic installations:** Installed capacity will be the total of the maximum unitary capacities of the photovoltaic installed.



AUCTION PROCEDURE CALCULATION OF THE RETRIBUTIVE REGIME

AUCTION PROCEDURE AND CALCULATION OF THE RETRIBUTIVE REGIME

Auction product

- The auction will be the right to perceive the specific retributive regime for new installed capacity.

Amount to be auctioned

- Maximum amount

2,000 MW

Auction result

- The resulting capacity for each participant and technology.
- The reduction percentage of the standard value of the initial investment of the Reference Type Installation (RTI).

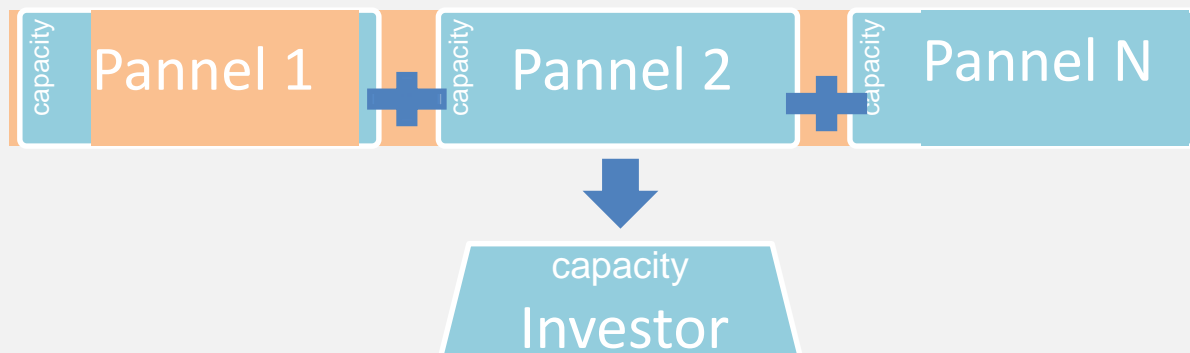
EXPLANATORY NOTE

INSTALLED CAPACITY

- The offers submitted will be based on the installed capacity according to the definition of installed capacity of Article 3 of Royal Decree 413/2014, of 6 June (Call Order 2,000 MW)
 - Installations with equipments in series:** installed capacity will be the minor capacity from those specified in the plate of characteristics.



- Photovoltaic installations:** Installed capacity will be the total of the maximum unitary capacities of the photovoltaic modules installed.



AUCTION PROCEDURE AND CALCULATION OF THE RETRIBUTIVE REGIME

RETRIBUTIVE PARAMETERS

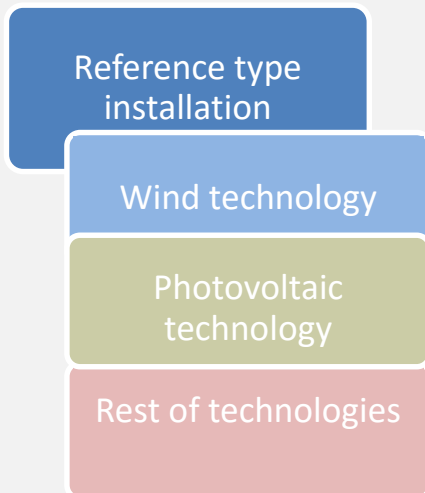
- The Reference Type Installations (RTI) and its retributive parameters are defined.
- The resulting values of the retributive parameters of each Type Installation (TI) will be obtained from the retributive parameters of the RTI and the auction results.



AUCTION PROCEDURE AND CALCULATION OF THE RETRIBUTIVE REGIME

RETRIBUTIVE PARAMETERS OF THE REFERENCE TYPE INSTALLATION (RTI)

- The following parameters are considered (art. 4 Order ETU/315/2017):



RTI
a) Regulatory life span: 25 years for all the technologies.
b) Standard value of the initial investment of the RTI.
c) Amount of equivalent operating hours.
d) Expected reference price for the sale of electricity.
e) Upper and lower limits of market price.
f) Applied coefficient of the reference price to estimate the exploitation revenues from sale of energy.
g) Minimum amount of equivalent operating hours per year, annual operating threshold and percentages.
h) Exploitation costs.
i) Investment return of the reference type installation.
j)) Reference value for the RTI.
Different values of the retributive parameters for a RTI will be established on the basis of the year for the definitive exploitation.

AUCTION PROCEDURE AND CALCULATION OF THE RETRIBUTIVE REGIME

- RTIs have a group of retributive parameters associated to each authorisation year of definitive exploitation.
- These retributive parameters are established in Annex I of Order ETU/315/2017

Technologies	Code	Year	Life span	Standard value initial investment (€/MW)	Amount of equivalent or functioning hours	Exploitation costs (€/MWh)	Amount of equivalent or functioning hours Minimum /year	Functioning threshold	Investment return (€/MWh) $R_{invTR_j,a}$	Unitary overcost - RTI (€) $U_{TR_j,a}$	(€) $m_{TR_j,a}$
Wind	ITR-0103	2017	25	1.200.000	3.000	20,52	3.000	0	47.684	15,89	115.786
		2018	25	1.200.000	3.000	20,57	3.000	0	46.578	15,53	115.786
		2019	25	1.200.000	3.000	20,72	3.000	0	45.056	15,02	115.786
PV	ITR-0104	2017	25	1.200.000	2.367	21,46	2.367	0	39.646	16,75	115.786
		2018	25	1.200.000	2.367	21,49	2.367	0	38.480	16,26	115.786
		2019	25	1.200.000	2.367	21,63	2.367	0	36.908	15,59	115.786
All others	ITR-0105	2017	25	2.000.000	5.000	39,55	5.000	0	148.875	29,78	192.977
		2018	25	2.000.000	5.000	39,79	5.000	0	147.655	29,53	192.977
		2019	25	2.000.000	5.000	40,12	5.000	0	145.636	29,13	192.977

1 Unitary over cost of the RTI is calculated dividing the Investment return of the RTI for a given year by the amount of equivalent functioning hours for that year.

$m_{TR_j,a}$: Calculation of the investment return for the TI associated to the RTI "j" with a given year of exploitation permit "a"

AUCTION PROCEDURE AND CALCULATION OF THE RETRIBUTIVE REGIME

RETRIBUTIVE REGIME

- Retributive parameters for each TI will be calculated on the basis of the parameters of the respective RTI and the auction results.
- Retributive parameters for each TI will be the same as those for the RTI, except for the standard value of the initial investment and the investment compensation:
 - The standard value for the initial investment of each TI will be calculated applying the reduction percentage obtained in the auction to the standard value of the initial investment of the RTI.
 - The investment return of each TI will be obtained applying to these parameters the methodology as defined in Royal Decree 413/2014 and the simplified formula in Annex I of Order ETU/315/2017 for 2017 to 2019:

For a given year “a”:

$$R_{inv_{IT,j,a}} = R_{inv_{ITR,j,a}} - m_{ITR,j,a} * Red_{ITR,j}$$

- The value of the investment return cannot be negative.
- The retributive parameters of the TI will be revised and updated in accordance with Law 24/2013 and Royal Decree 413/2014.

AUCTION PROCEDURE AND CALCULATION OF THE RETRIBUTIVE REGIME

CHARACTERISTICS OF THE AUCTION

- Participants will present:
 - A Guarantee of deposit of 60 €/KW
 - The rest of the mandatory documents in accordance with ETU/315/2017
- The bids will be submitted in a closed envelope and decided through marginal system.
- The product to be auctioned will be the right to perceive the specific retributive regime up to the allotted installed capacity.
- It will be implemented by electronic means.
- The offers will be presented in reference to the RTI of each respective technology.
- The participants will offer a reduction percentage over the initial investment value for the respective RTI for which it intends to present.
- The offers will not have to identify the individual installations.

AUCTION PROCEDURE

OMIE (1)	<u>Entity charged with the auction:</u> it will pre-qualify the participants, receive the offers, verify compliance with the established requirements and calculate the auction results.
CNMC (2)	<u>Auction proceeds supervisión:</u> will ensure fair competition among participants and transparent and non discriminatory results.

An auction cost of 0.08€/KW will be charged to each successful participant as section 6 of ETU/315/2017

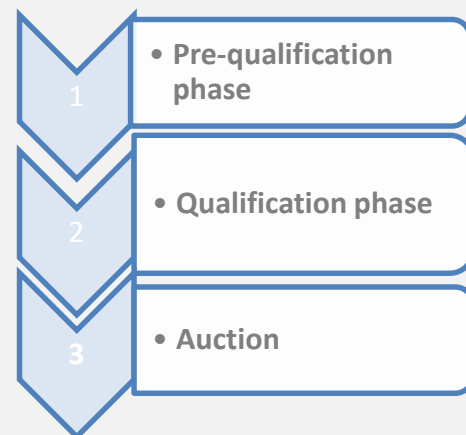
1. OMIE: manages the entirety of the markets (daily and intraday) for the whole of the Iberian Peninsula, and its operating model is the same as the one applied by many other European markets. <http://www.omie.es/en/home/information-company>
2. CNMC: Spanish National Markets and Competition Commission

AUCTION PROCEDURE

AUCTION PARTICIPATION APPLICATION



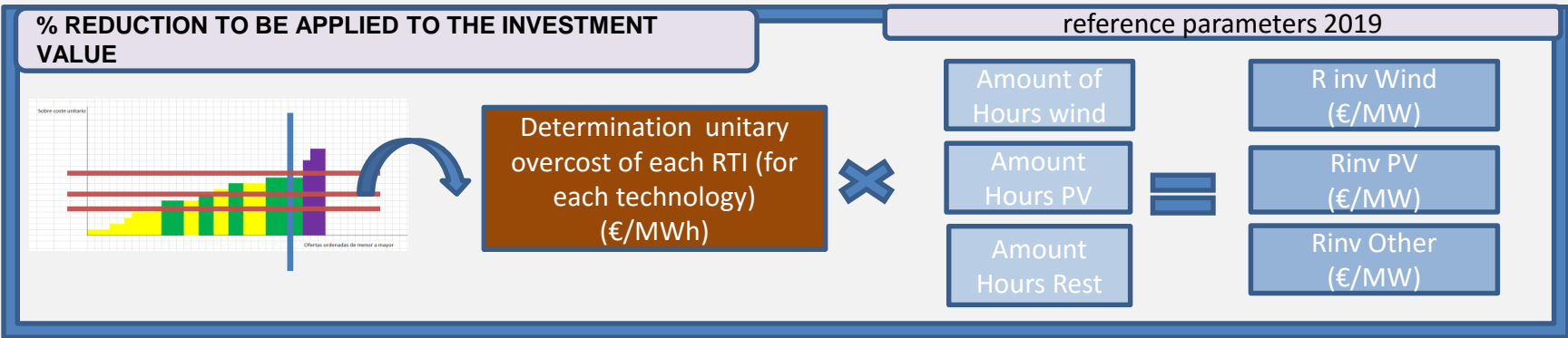
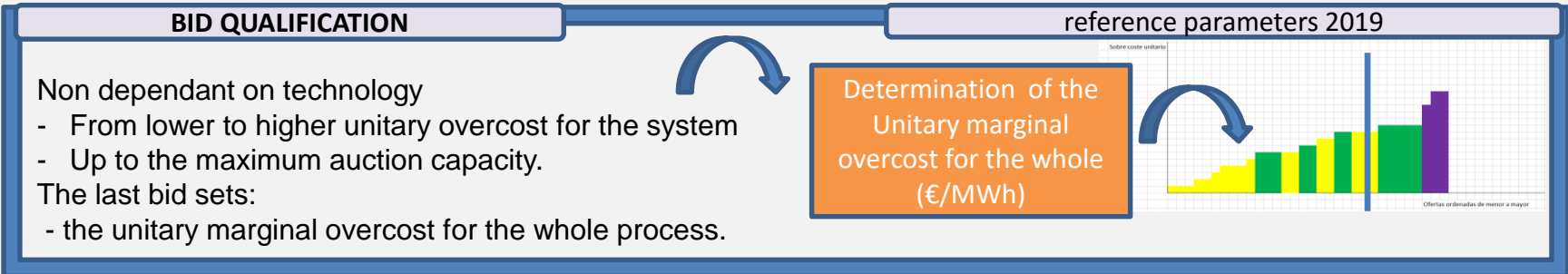
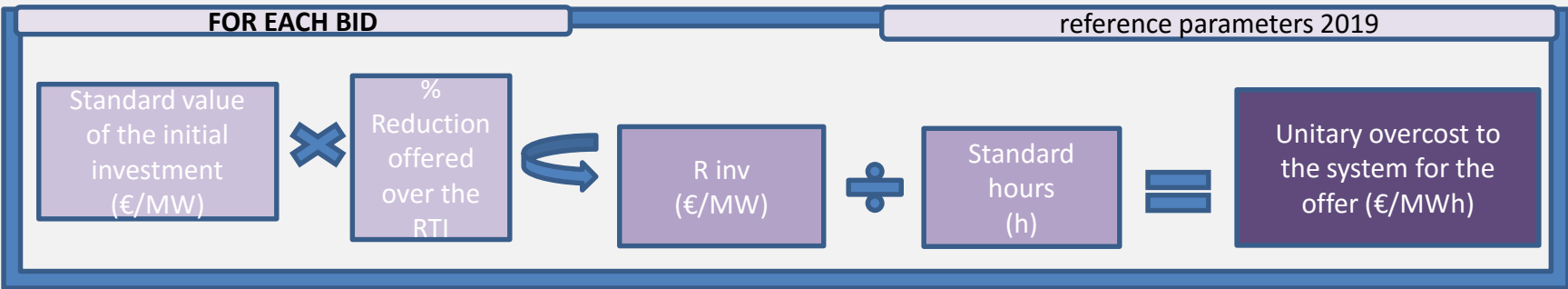
- The application will be submitted by electronic means.
- Together with the participation guarantee (60€/KW).




SUBMISSION OF TENDERS

- An offer per RTI per participant.
- Each offer may present up to 40 sections.
- Each section will be presented with an specific capacity and a reduction percentage of the standard value of the initial investment of the RTI.
- The maximum amount to be offered in an indivisible section is 200 MW (Point 15,1 Rules Resolution)
- Reduction percentages shall be defined with 2 decimal places in a range between the minimum and the maximum value as indicated in Section 5 of the Call Resolution.

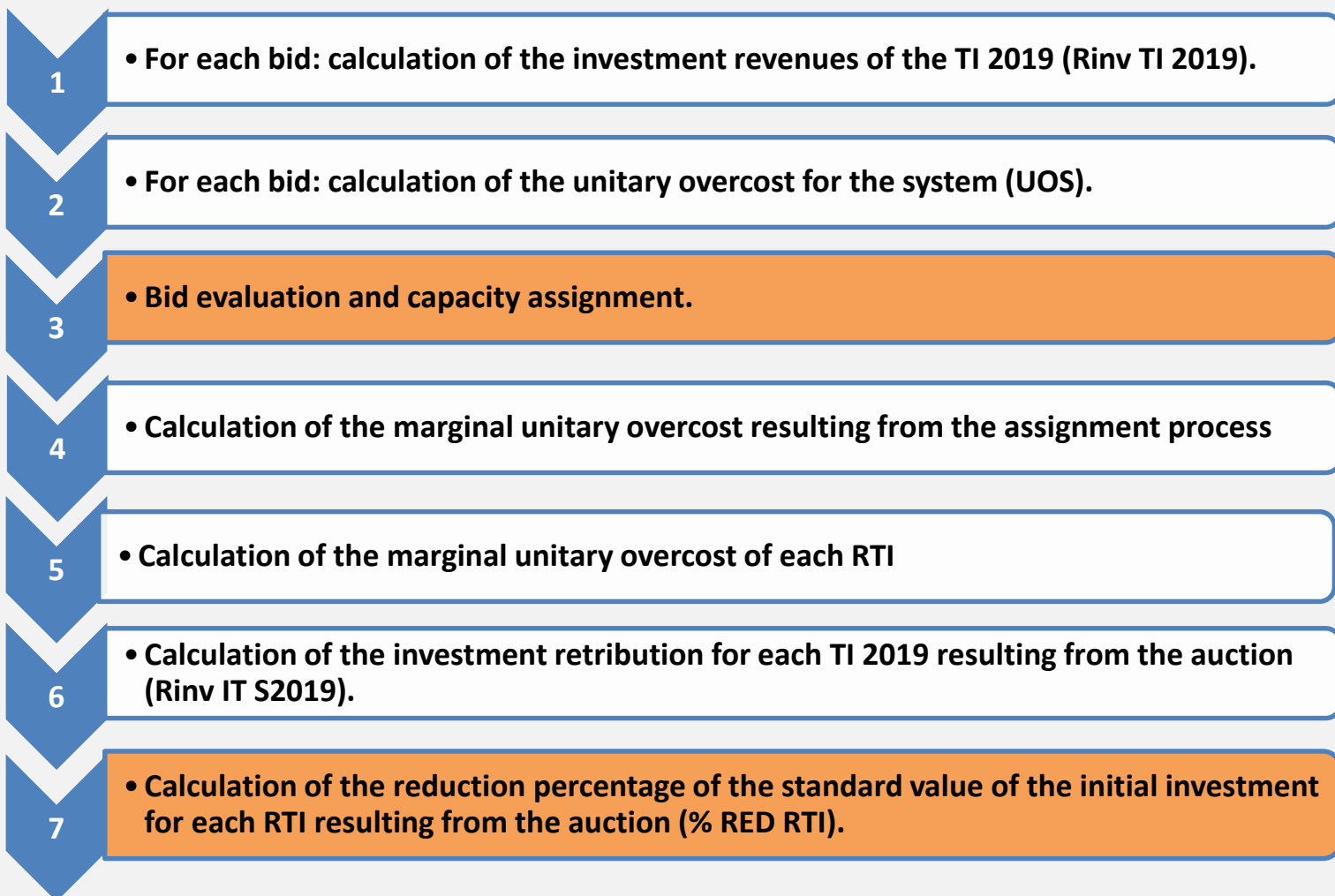
AUCTION PROCEDURE



The final reduction percentage will allow each successful bidder to know the retributive parameters that will be applied in its installation


% Final Reduction for RTI

AWARDING CAPACITY AND CALCULATION OF PARAMETERS



AUCTION PROCEDURE (AWARDING CAPACITY)

1.- FOR EACH BID: CALCULATION OF THE INVESTMENT RETRIBUTION OF THE TI 2019 (Rinv TI 2019) (I)

- methodology established in the RD 413/2014, specified in Annex VI and Annex I of Order ETU/315/2017.

$$\text{Rinv IT 2019} = \text{Rinv ITR 2019} - \text{ratio 2019} \times \% \text{ reduction bidded}$$

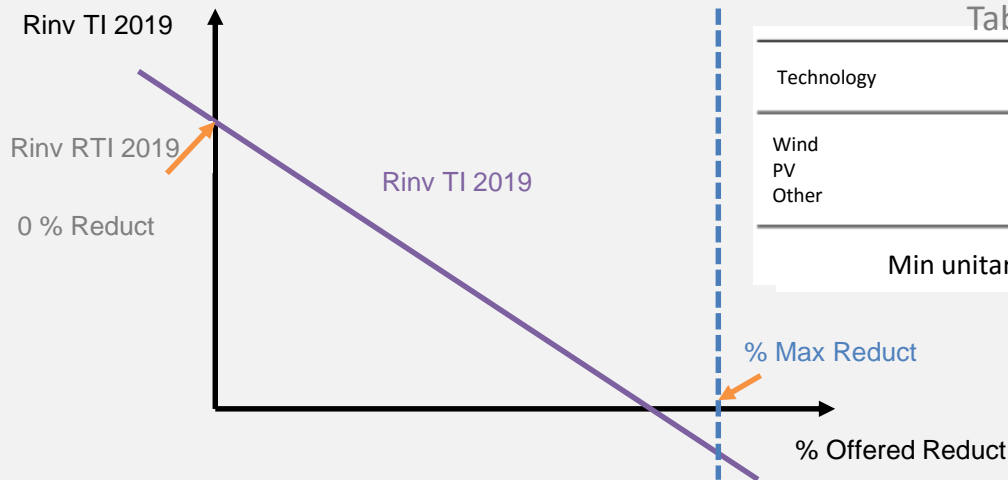


Table % 5th Section Resolution call

Technology	RTI (ITR in Spanish)	Min value of the reduction % offered	Max value of the reduction % offered
Wind	ITR-0103	0,00 %	63,43 %
PV	ITR-0104	0,00 %	51,22 %
Other	ITR-0105	0,00 %	99,99 %

Min unitary over cost value is established in - 9.462 €/MWh

- It will be possible to give negative values to the investment retribution due to the implementation of the previous formula, only to the effects of the assignment process

AUCTION PROCEDURE (AWARDING CAPACITY)

1.- FOR EACH BID: CALCULATION OF THE INVESTMENT RETRIBUTION FOR THE TI 2019 (Rinv TI 2019) (II)

– Example: Presentation of a wind bid

Technology	Code	Year	Life span	Standard value initial investment	Amount of equivalent or functioning hours	Exploitation costs	Amount of equivalent or functioning hours Minimum /year	Functioning threshold	Investment return (€/MWh)	Max Unitary overcost - RTI (€)
Wind	ITR-0103	2017	25	1.200.000	3.000	20,52	3.000	0	47.684	15,89
		2018	25	1.200.000	3.000	20,57	3.000	0	46.578	15,53
		2019	25	1.200.000	3.000	20,72	3.000	0	45.056	15,02

Technology	Code RTI (ITR in Spanish)	Group/Subgroup (Art. 2 Real Decreto 413/2014)	Year	Code	m _{ITR,ja}
Wind	ITR-0103	b.2	2017	IT-04013	115.786
			2018	IT-04014	115.786
			2019	IT-04015	115.786

$$\text{Rinv TI 2019} = \text{Rinv RTI 2019} - \text{ratio 2019} \times \% \text{ reduct. bided}$$

Rinv RTI 2019 = 45,056

Ration 2019 = 115,786

% Reduct. Bided = 10%

Rinv TI 2019 for this participant = 33,477.400

AUCTION PROCEDURE (AWARDING CAPACITY)

2.- FOR EACH BID: CALCULATION OF UNITARY OVERCOST FOR THE SYSTEM (CUOS)

– [Art.14.2.b) Order] Calculated as:

$$\text{CUOS} = \frac{\text{Rinv TI 2019}}{\text{Nh RTI 2019}}$$

– Example: Presentation of a wind bid

Technology	Code	Year	Life span	Standard value initial investment	Amount of equivalent or functioning hours	Exploitation costs	Amount of equivalent or functioning hours Minimum /year	Functioning threshold	Investment return (€/MWh)	Max Unitary overcost - RTI (€)
Wind	ITR-0103	2017	25	1.200.000	3.000	20,52	3.000	0	47.684	15,89
		2018	25	1.200.000	3.000	20,57	3.000	0	46.578	15,53
		2019	25	1.200.000	3.000	20,72	3.000	0	45.056	15,02

R inv IT 2019 = 33,477.400

Amount of h ITR 2019 = 3,000



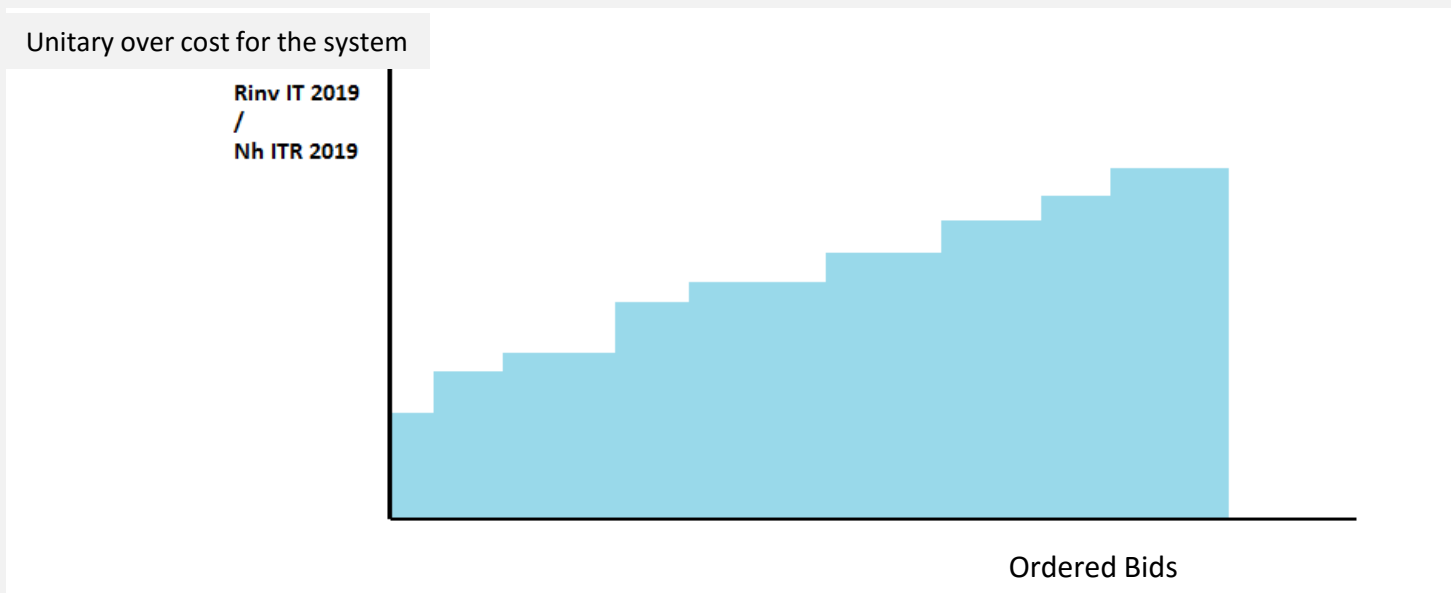
CUOS = 11.159

with 3 decimal places



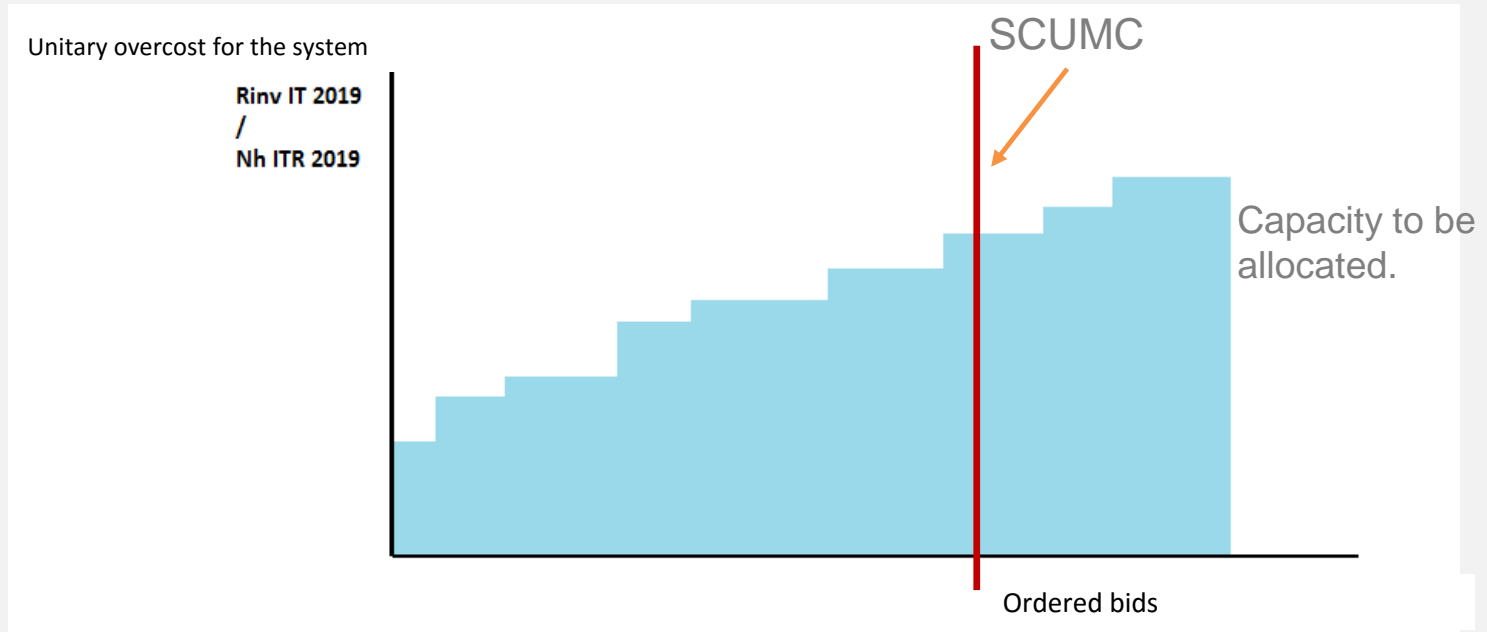
3.- BID EVALUATION AND CAPACITY ASSIGNMENT

- [Art.14.2.c) Order] Bids will be evaluated, from the lower to the higher CUOS calculated value. The successful bids will be those with a lower value until the capacity to be allocated (2,000 MW) is reached.
- Criteria for solving tie-breaks are explained in the bid rules .
- the awarded capacity to each participant is obtained



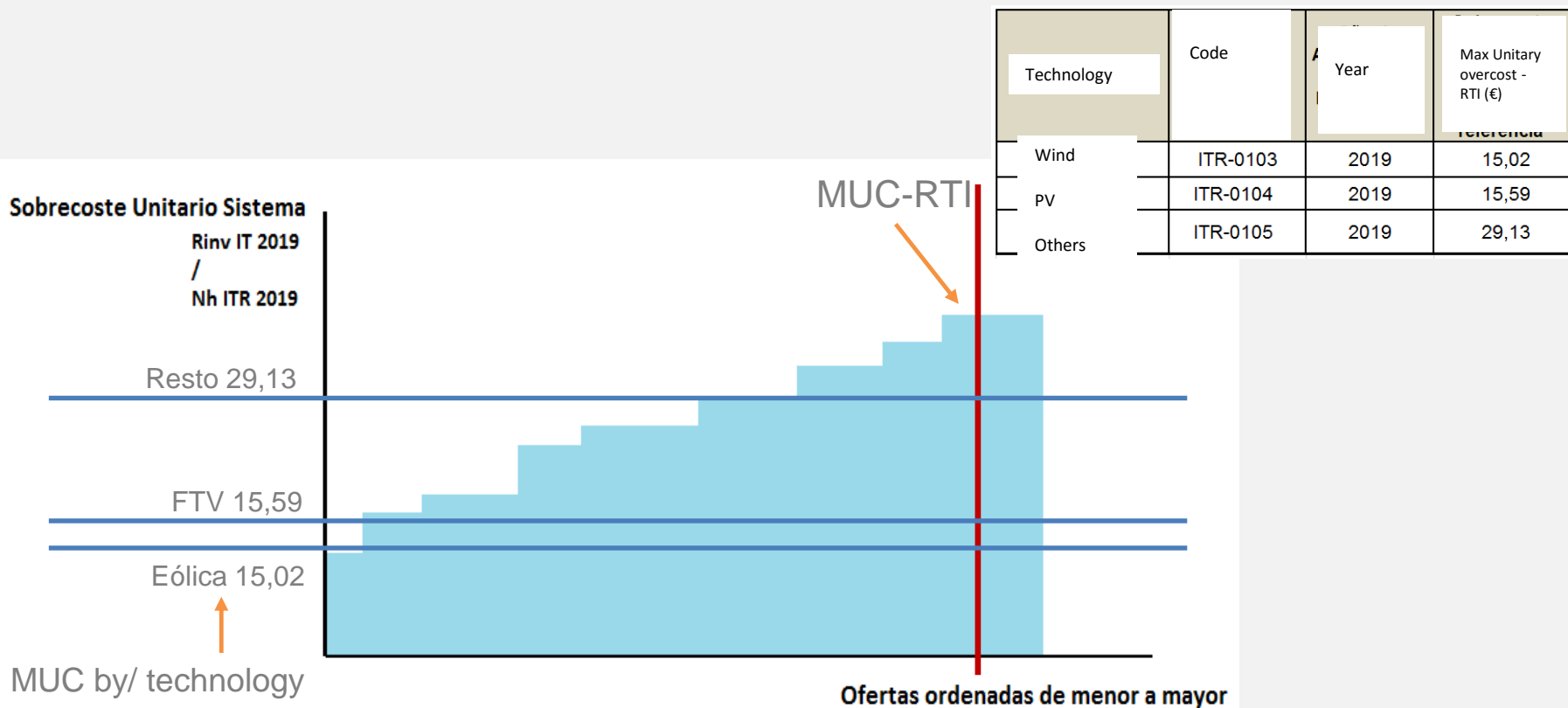
4.- CALCULATION OF THE MARGINAL UNITARY COVERCOST RESULTING FROM THE “CASACION”

- The SCUMC is obtained according to the rules Resolution.



5.- CALCULATION OF THE MARGINAL UNITARY COVERCOST OF EACH RTI (MUC-RTI)

- [Art.14.2.e) Order] SCUMUC-RTI is calculated as the **mínimum** value resulting from:
 - Value of the marginal unitary cost (MUC).
 - Value of the **máximum** unitary cost of the reference type installation



AUCTION PROCEDURE (AWARDING CAPACITY)

6.- CALCULATION OF THE INVESTMENT RETRIBUTION FOR EACH TI 2019 RESULTING FROM THE AUCTION (RINV IT S2019).

- [Art.14.2.f) Order] It will be calculated as:

Rinv TI S2019

=

CUOM RTI

x

Nh RTI 2019

AUCTION PROCEDURE (CALCULATION OF PARAMETERS)

7.- CALCULATION OF THE REDUCTION PERCENTAGE OF THE STANDARD VALUE OF THE INITIAL INVESTMENT FOR EACH RTI RESULTING FROM THE AUCTION (% RED RTI).

- [Art.14.2.g) Order] From the R inv TI S2019 value and the R inv RTI 2019 value, the reduction % of the standard initial investment value of each installation will be calculated in accordance with the results of the auction and using the simplified expression from section 3 of Annex I of the Order:

R inv TI S2019

=

R inv RTI 2019

-

Ratio 2019

x

% Red RTI

% with 2 decimal places

AUCTION RESULT

- The auction will decide:
 - The assigned capacity to each participant for each technology.
 - The reduction % of the standard value for the initial RTI investment.
- For each TI will be calculated:
 - The value of the initial investment.
 - The investment retribution.
 - The rest of the retributive parameters.
- The auction awarding will implies, once presented the economic guarantee to the Spanish General Savings Deposit, and once the holder has submitted the application, the right of inscription of the awarded capacity into the Registry of the specific retributive regime in status of pre-assignment.
- The corresponding TI will be assigned in accordance with the authorisation year for the definitive exploitation of the installation,.

ACLARATORY NOTE ON THE GUARANTEES

GUARANTEE FOR THE PARTICIPATION IN THE AUCTION

- It will be presented to OMIE to enable participation in the auction.
- 60 €/KW.
- It will be returned to the non awarded stakeholders after the finalisation of the auction.
- It will be returned to the awarded stakeholders from the moment they register in the Registry SRR – Pre assignment.
- It will be executed (total/partial) if the registry requirements in the Registry are not fulfilled.

GUARANTEE FOR THE INSCRIPTION IN THE SRR-E

- It will be presented to the Spanish General Savings Deposit in order to enable register into the SRR Registry – Pre assignment.
- 60 €/KW.
- It will be returned/executed in phases with the fulfilment of established intermediate steps.
- Final return will take place with the definitive registration into the Registry SRR - E (exploitation)

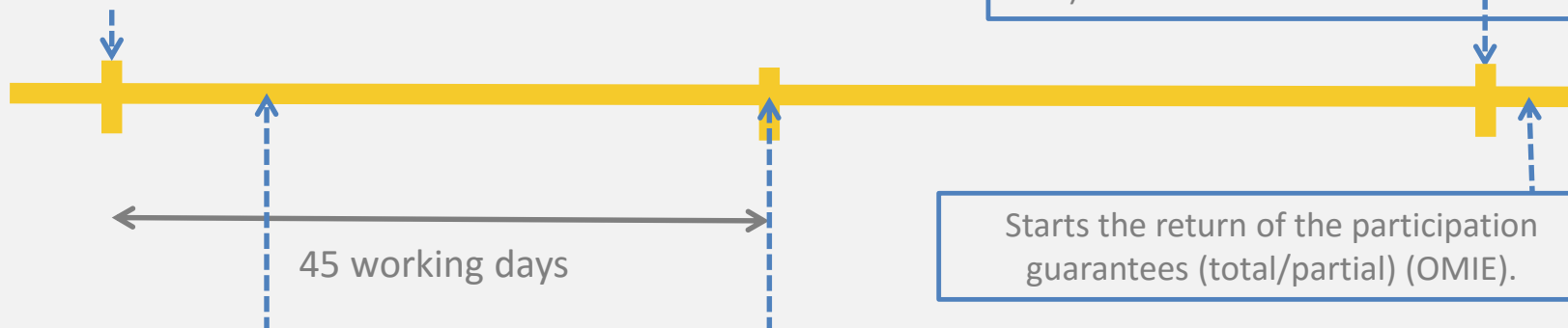
INSCRIPTION IN THE SPECIFIC RETRIBUTIVE REGIME

INSCRIPTION IN THE SPECIFIC RETRIBUTIVE REGIME (SRR-PREASSIGNATION)

- Inscription application: Accepted bids imply, once the guarantee presented, the right of inscription in the Registry SRR of pre-assignment.

Resolution that resolves the auction (DGPEM in BOE).

Resolution of inscription in the SRR Registry pre-assignment (DGPEM in BOE).



Starts the return of the participation guarantees (total/partial) (OMIE).

Inscription application in the SRR-Pre-assignment.

- Holder information, agent, RTI, awarded capacity (not associated with particular installations).
- Copy of the presentation of the guarantee for inscription (60€/kW) and safeguard of the Spanish General Savings Deposit.

In case the participant does not fulfill the inscription in the Registry SRR- Pre assignment of all the awarded capacity, the remaining part of the guarantee shall be executed to participate in the auction.

INSCRIPTION IN THE RETRIBUTIVE REGIME (INTERMEDIATE STEPS)

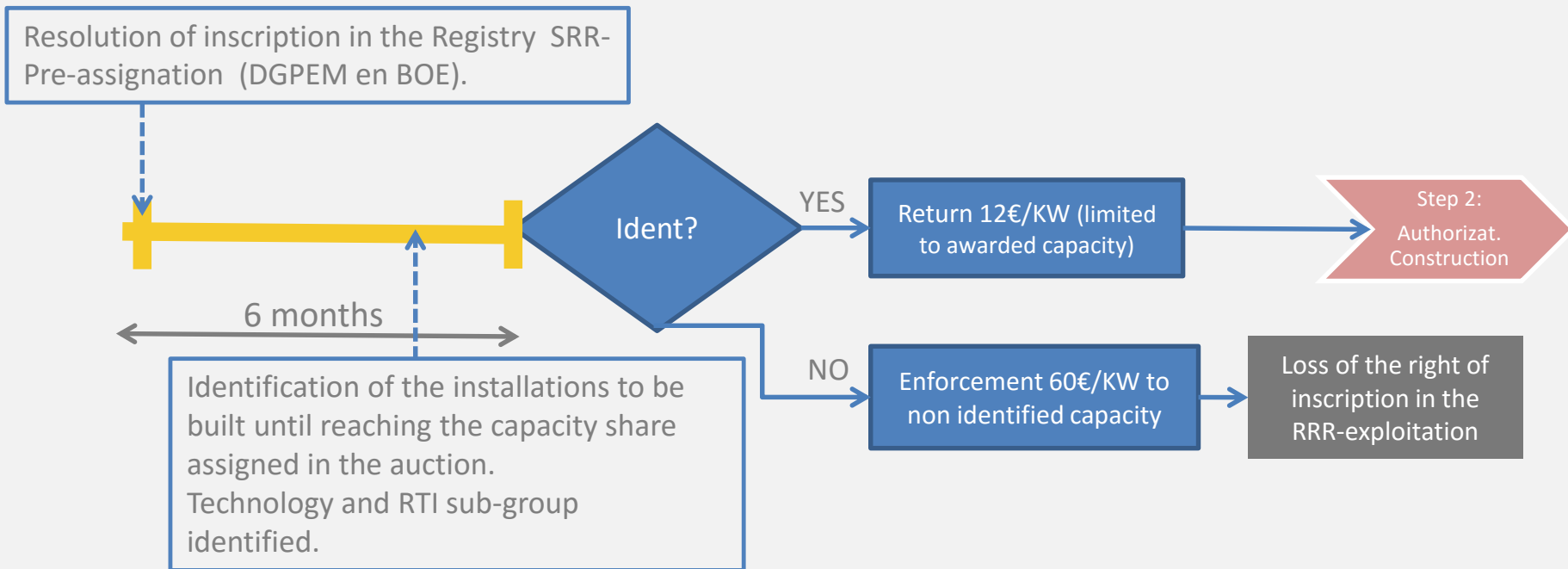
- Once registered in the Registry of the Retributive regime as pre-assigned status, several intermediate steps will have to be complied with.
- This compliance will have effects on the :
 - Guarantee (cancelation or execution total or partial).
 - The economic rights (inscription in the SRR Registry-exploitation)



INSCRIPTION IN THE RETRIBUTIVE REGIME (INTERMEDIATE STEPS)

- Obligation to identify the installation/s to be built until the capacity share registered in the SRR-Registry – Pre-assignment is attained.

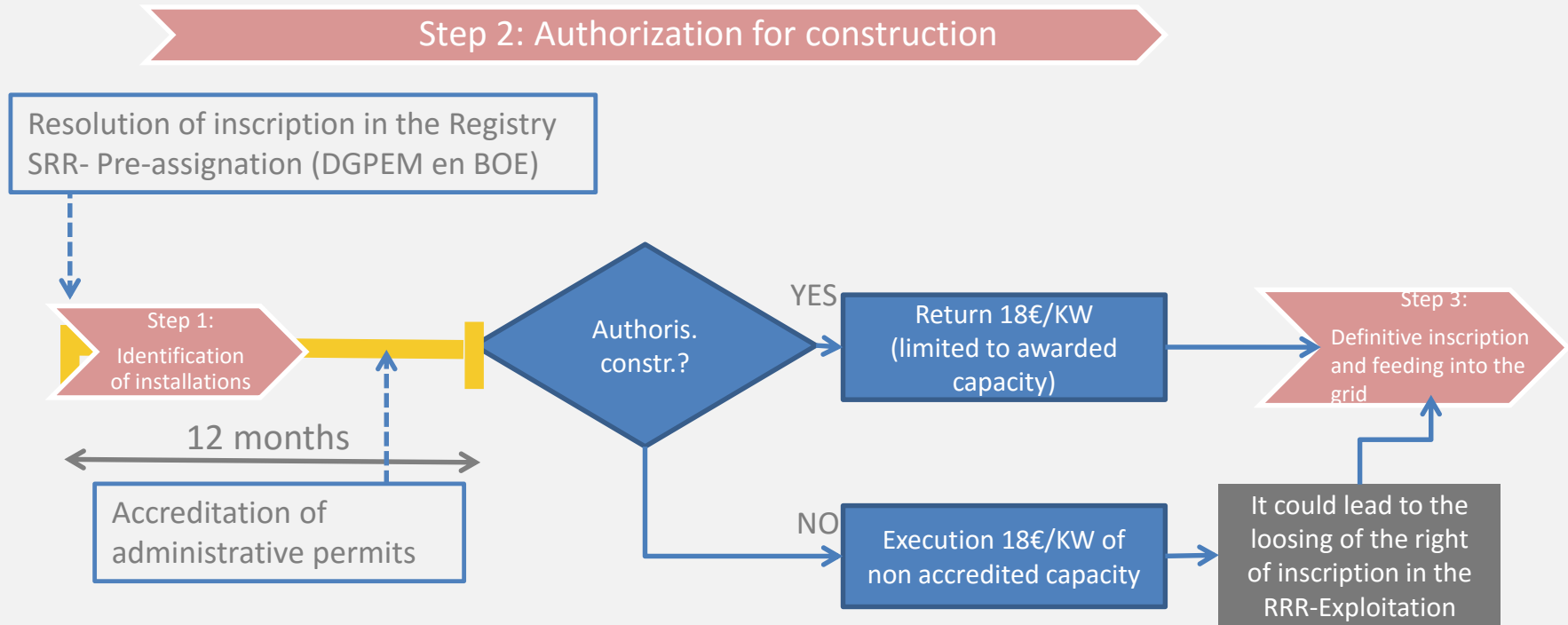
Step 1: Installations identification



It is allowed (only for this phase) to identify installations with a total capacity of up to 150% of awarded capacity.

INSCRIPTION IN THE RETRIBUTIVE REGIME (INTERMEDIATE STEPS)

- Obligation to obtain the administrative permits of construction for each installation:



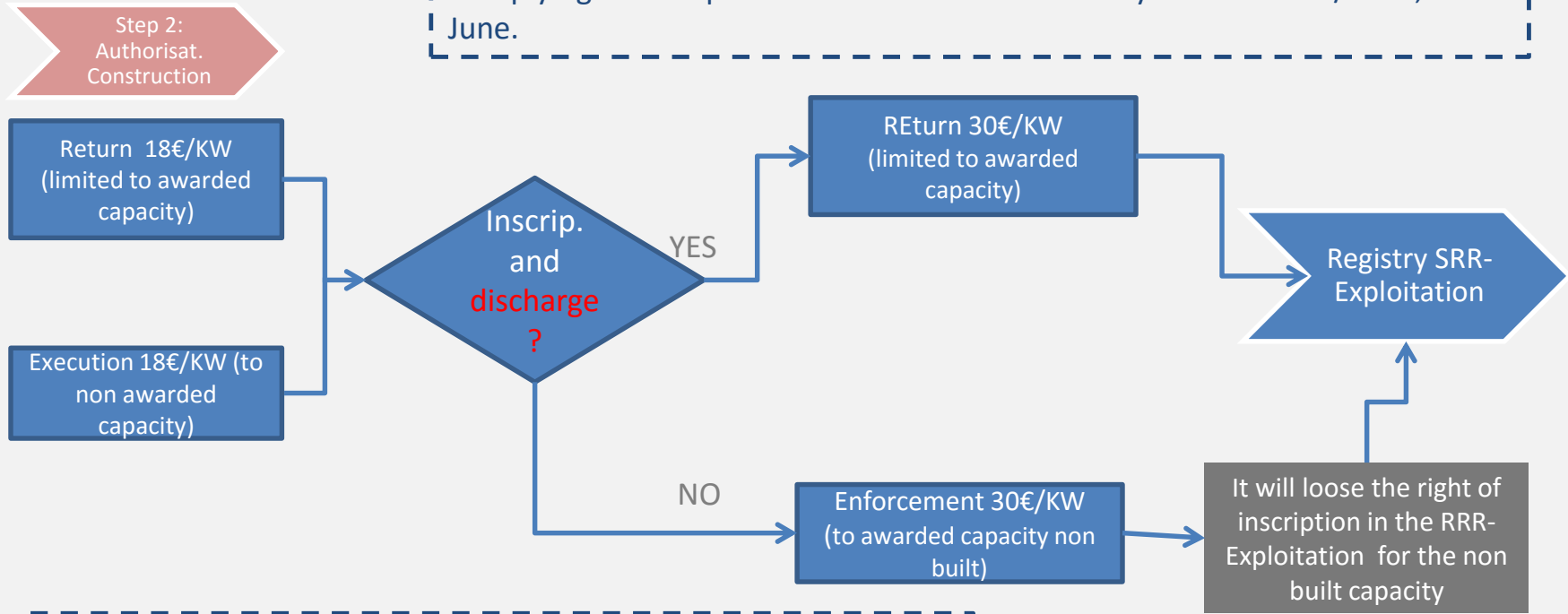
The authorisation for the identified installations shall be limited to the total awarded capacity.

INSCRIPTION IN THE RETRIBUTIVE REGIME (INTERMEDIATE STEPS)

- Obligation to register in the administrative registry for electric power production installations and feeding into the grid:

Step 3: Def. inscription and feeding into the grid

Complying with requirements of art. 46 and 47 Royal Decree 413/2014, of 6 June.

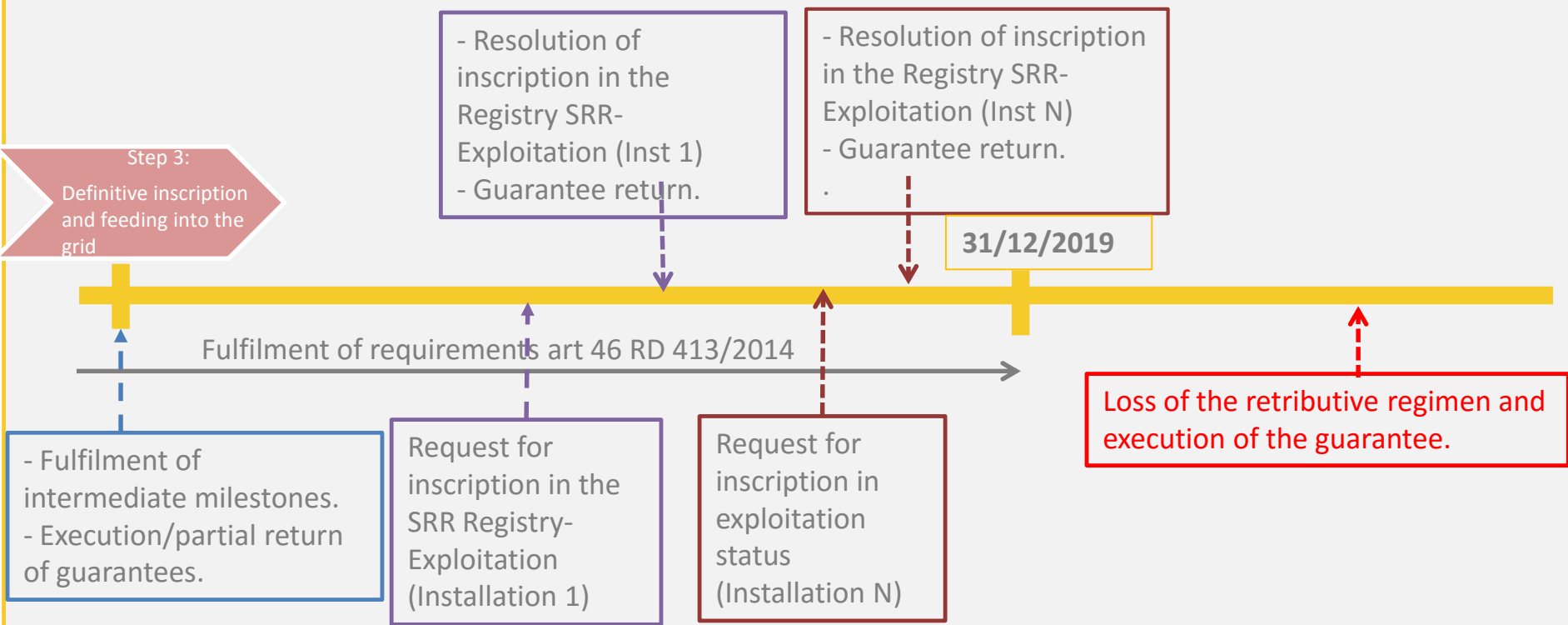


Built installation, certification of feeding into the grid, and registered in the Administrative Registry of Installations of electric power production (art. 46 and 47 Royal Decree 413/2014)

INSCRIPTION IN THE RETRIBUTIVE REGIME (SRR-EXPLOITATION)

- Request for inscription in the SRR Registry-Exploitation:

In the moment of request: For same holder, identified installation and capacity.



INSCRIPTION IN THE RETRIBUTIVE REGIME (SRR-EXPLOITATION)

LOSS OF THE SPECIFIC RETRIBUTIVE REGIMEN

- Total: in case of non compliance with art. 46 RD 413/2014 on time (deadline 31/12/2019).
- Partial: To non built capacity.
- Execution: It will imply the loss of the rights associated to the retributive regime and the execution of the guarantee.
- The cancelation procedure by non-compliance shall be implemented in accordance with art.48.

INSCRIPTION IN THE RETRIBUTIVE REGIME (SRR-EXPLOITATION)

REGISTRATION PROCEDURE IN THE SRR- EXPLOITATION REGISTRY

- In agreement with art. 47 Royal Decree 413/2014, of 6 June.
- Complying with art. 46 Royal Decree 413/2014, of 6 June.
 - Finalization of installations on due time.
 - Registration in the Administrative Registry of electric power production Installations
 - The start of energy supply
- Registration application in exploitation status will include:
 - Responsible statement that the installation is a new installation and that is included in the scope of the call.
 - Responsible statement that the Company is not in difficulty situation, and has not received public financing.

INSCRIPTION IN THE RETRIBUTIVE REGIME (SRR-EXPLOITATION)

The installation or installations for which the registration in the Registry of specific retributive regime in exploitation status is requested, shall:

- Match the installation or installations previously identified.
- Have the same holder as stated, in that moment, in the Registry of SRR- Pre-assignment.
- Installed capacity will be no higher than the capacity of the installations previously identified, nor than the registered capacity in the Registry SRR-Pre-assignment.
- TI for which it is requested, will have to be concordant with the pre-assigned RTI.
- Have the same technology, category and reference type installation.

The installation will be assigned to the corresponding type installation according to the RTI and the year of the authorization of the definitive exploitation of the installation.

- Example: Wind installation with year of authorisation of definitive exploitation: 2018, gets TI-4014.

Tecnología	Código de Identificación de la Instalación Tipo de Referencia	Año de Autorización de Explotación Definitiva "a"	Subgrupo (Art. 2. Real Decreto 413/2014)	Código de Identificación de la Instalación Tipo	MITR.La
Eólica	ITR-0103	2017	b.2.1	IT-04013	115.786
		2018	b.2.1	IT-04014	115.786
		2019	b.2.1	IT-04015	115.786

Thank you very much