



An Roinn Comhshaoil,
Aeráide agus Cumarsáide
Department of the Environment,
Climate and Communications

RESS 3 Auction Design and Implementation Project

Stakeholder Briefing and Q&A

09 December 2022

Agenda



- Introduction
- General Overview of RESS
- RESS 1 / 2 Programme updates
- Detailed overview of main consultation items for RESS 3
- Q&A Session

General Overview of RESS



- State aid approval granted for RESS in 2020, with RESS to be characterised by a series of auctions throughout the lifetime of the scheme.
 - *DECC are in the process of re-notifying the scheme to account for some of the proposed changes for RESS 3 / ORESS 1.*
- Funded via the Public Service Obligation (PSO) mechanism.
- Auction volumes expected to range from 2,000 to 5,500 GWh, final quantity will be dependent on the competition ratio and bid prices.
- Offers to be selected in ascending price order and awarded on a Pay-As-Bid basis.

General Overview of RESS



Participants in RESS are required:

- To be a new or repowered renewable project.
- Have full planning permission for the renewable project.
- Projects are required to have a Grid Connection Agreement (GCA) from the System Operators, EirGrid or ESB Networks, or be listed as an eligible ECP project.
- Demonstrate control of the site for the purposes of developing and operating the project.
- To have a PPA with a supplier that is eligible for the PSO process.

General Overview of RESS



The RESS Award is structured as:

- A two-way support arrangement through Floating Feed-in-Premium comparing a strike price (bid price) with a reference market price, based on metered output.
- Support for a successful project will nominally be 15 years with a range from 14 to 16.5 years. Additional support will be provided for reaching early Commercial Operation of up to 1.5 years. A Longstop mechanism will allow for projects to reach Commercial Operation up to one year beyond the COD Milestone with erosion of support.
 - *For RESS 3 DECC are considering a duration other than 15 years.*
- An Implementation Agreement will commit the project to being developed as offered in return for receiving a Letter of Offer.

RESS 1 Update



- RESS 1 auction results September 2020, auction largely successful. Delivered high volumes, good community participation and competitive bid prices*.
- 1,080 MW capacity successful across 68 projects, including 7 community category projects.
- 61 projects remaining in RESS 1, c. 1,020 MW.
- 15 projects, c. 488 MW of projects energised to date. Anticipating at least 3 more projects to energise by end 2022, c. additional 100MW.

**competitive, but higher than in other European countries*

RESS 2 Design and Update



- Primary design principles maintained;
 - *Offer prices must be competitive and costs to consumer minimised.*
 - *‘Shovel ready’ eligibility requirement.*
 - *Procure additional volumes within 5% final bid price.*
 - *Incentivise strong community participation.*
- Bid bonds / performance securities increased. They were set deliberately low in RESS 1 to reflect a transition from REFIT. Levels increased to secure the development of projects to meet national and EU renewable energy and climate commitments and to discourage speculative participation in auctions which unfairly and inefficiently precludes the development of other projects.

RESS 2 Design Continued



- Technology specific ECFs utilised to multiply the as-offered bid price for evaluation purposes in the auction. This was implemented to account for the fact that the overall consumer cost implications of RESS differ across technologies, not all reflected in the bid price.
- Eligible technologies for RESS 2 were expanded to cater for hybrid connections / multiple technologies installed together.
- The financial questionnaire which was voluntary in RESS 1 became mandatory. These questionnaires are required to aid in the ex-post evaluation of the scheme.
- The community category requirement changed from 51% ownership to 100% community ownership

RESS 2 Update



- RESS 2 auction results published in June 2022, auction largely successful. Delivered large volumes, but at higher bid prices than in RESS 1.
- In the context of inflationary pressures and higher bid prices, the Minister exercised his reserved rights and only accepted the capacity needed to clear the auction's target volume.
- Over 1,800 MW capacity successful across 75 projects, including 10 community category projects.
- Good community participation following change to 100% community ownership.

Overview of RESS 3 Consultation



- We are seeking feedback from stakeholders on key design changes proposed for RESS 3. Some items are significant design changes, others are minor / administrative changes.
- The subjects on which we have sought specific feedback through the Consultation are:
 1. *Availability Compensation*
 2. *Duration of support*
 3. *Indexation*
 4. *Locational considerations*
 5. *Eligible Technologies / Hybrid Storage Projects*
 6. *Evaluation Correction Factor*
 7. *Bid Bonds and Performance Securities*
 8. *Price Cap adjustment*

Overview of RESS 3 Consultation



- 9. *Community Category*
- 10. *Director's Declaration*
- 11. *Grid Co-ordinates*
- 12. *Consultation with Third Parties*
- 13. *Shovel Ready requirement*
- 14. *Adoption of DocuSign for the Implementation Agreement*
- 15. *Reserved Rights of the Minister*
- 16. *Ability to Withdraw from RESS*
- 17. *Corporate Power Purchase Agreements (CPPAs), Merchant Operation and Optionality*

1. Availability Compensation - UAEC



- DECC is considering moving from the Curtailment Compensation Arrangement (CCA) that was included in RESS 1 & 2 to an Unrealised Available Energy Compensation (UAEC), “Availability”, provision in RESS 3. This provision is intended to de-risk RESS participant exposure to uncertainty surrounding oversupply and curtailment.
- UAEC compensates availability not converted to generation for reasons of either curtailment or oversupply at the RESS Strike Price.
- It does not compensate for availability that is constrained, as transmission constraints remain an important locational signal. Payment for constrained availability is dealt with instead by the relevant provisions of the TSC and the SEMC response to Article 13 of the EU Clean Energy Package.

1. UAEC Continued



- The objective of UAEC is to significantly de-risk RESS participant exposure to uncertainty surrounding oversupply and curtailment.
- UAEC is additional to the RESS CfD support that applies for energy actually generated.
- It applies in specific circumstances in each hour where a RESS project has the availability to generate but where it didn't actually generate to the level of its availability.
- The UAEC expands CCA from RESS 1 & 2 to include oversupply.
- It removes the 10% threshold that CCA contained. The UAEC also allows for payment for availability during periods of negative prices (it does not require generation during periods of negative prices and no support will be provided in the event there is generation during periods of negative prices).

1. UAEC Compensation in Principle



	SEM Payment	RESS Support		Total Payment
		FIP	UAEC*	
	(a)	(b)	(c)	(d)=(a)+(b)+(c)
Real-Time Physical Availability, represented by:				
(1) Energy actually produced (MWh)	Day-Ahead Market Price	Offer Price <i>minus</i> DAM Price**	-	Offer Price
(2) Oversupply (MWh)	-	-	Offer Price	Offer Price
(3) Curtailment (MWh)	-	-	Offer Price***	Offer Price
(4) Constraints (MWh)	Constraint payment (if applicable) per SEM and Article 12/13	-	-	Constraint payment (if applicable) per SEM and Article 12/13
(5) System Outages (MWh)	If applicable, compensation per CRU decisions/arrangements for shared connections	-	-	If applicable, compensation per CRU decisions/arrangements for shared connections
(6) Other dispatch down by TSO**** (MWh)	-	-	Offer Price***	Offer Price
Total Real-Time Physical Availability (MWh)				

* Generator must have participated in SEM according to CRU terms, and must have followed disptatch instrucionts

** Any capacity revenue received is deducted from the FIP in the calculation of the RESS support payment

*** Any other compensation for availability is deducted from UAEC compensation, such that the total payment is the offer price

**** Could include out of merit situations where the generator is dispatched down by the TSO because balancing market price < actual variable cost of generation

1. UAEC - Key Conditions



- UAEC applies only to actual availability not converted to energy for reasons other than transmission constraints (for example, network and local stability related constraints). The CRU will be responsible for ensuring that the TSO has appropriate methodology in place for distinguishing between dispatch instructions that are issued for reason of transmission constraint vs. other reasons.
- SEMC's decision regarding Article 12 & 13 will apply in cases on energy not dispatched for reason of transmission constraints.
- It is in addition to remuneration from sale of energy and is in addition to support payments (as CCA was).
- Any other compensation for availability is deducted from UAEC compensation.

1. UAEC - Key Conditions Continued



- Actual availability must be measured and verified according to defined standards specified by the CRU, on a similar basis to the metering of energy production, to a revenue quality standard. This might mean that projects will need enhanced physical measuring devices to be eligible to receive UAEC.
- To be eligible for UAEC in an hour, the generator must have participated in the SEM under terms that will be specified by the CRU and offered its output at its variable cost (however it is not necessary that it secured a market position ex-ante). It must also comply with TSO operating instructions.
- UAEC only applies to variable generation projects.

2. Duration of Support



- DECC are considering options for a different duration of support than the 15 years (*with flexibility for early / late delivery*) that was provided for in RESS 1 & 2.
- Options for both a longer or shorter support term are being examined to determine the best balance between consumer protection / cost of capital and project deliverability.
- This change is being considered on the basis that it has the potential to reduce long-term market risk for projects and thereby reduce the lifetime costs to the energy consumer by reducing financing costs for the generation owner.

3. Indexation



- Since the RESS 2 auction opened, a number of inflationary risks have developed which we are considering in the design of RESS 3.
- In May 2022, the International Energy Agency (IEA) published a market update noting that there was a *short-term* inflation of input costs for wind and solar electricity generation projects in the order of 15 to 25 % over the previous 17 months.
- We are seeking evidence that indexation, or partial indexation, reduces the cost of capital, that this cost reduction is passed on to consumers through lower support payments in the long-term and that it reduces bid prices by removing some uncertainty.
- Due to the difference in timescales for delivery and deployment of onshore and offshore projects, a one size fits all approach cannot be considered for RESS and ORESS.

4. Locational Considerations



- A number of options are being considered, with the most likely mechanic, *in the event that any mechanism is chosen*, to be the implementation of explicit quantity based limits to each area of the network, A – K, taking account of available capacity and planned network upgrades.
- In RESS 1 and RESS 2 it was assumed that RESS projects were implicitly incentivised to manage connection costs, minimise TLAfs, and submit projects that face lower exposure to system constraints, and to avoid connection arrangements that pose relatively high risk of timely completion or utilisation.
- An explicit locational mechanism would not replace, but would rather layer on top of the existing implicit signals as a form of safety net. We are concerned that the implicit signals used in RESS 1 & 2 might not be sufficiently robust or effective alone, and that there could be a risk of projects being inefficiently located.

5. Eligible Technologies / Hybrid Storage Projects



- DECC proposes to retain the two options for the configuration of hybrid renewable generation and storage projects which were developed in RESS 2.
 - *Option 1: only the renewable generation portion of the facility (i.e. the wind farm or solar farm) is considered as being the RESS 3 Project– the storage is separate*
 - *Option 2: the storage is “behind the meter” and is considered as being an integral part of the RESS 3 Project.*
- Consider expanding the eligible technologies / hybrid pairings supported under RESS 3 to include a wind + solar + storage option. *Inclusion dependent on project pipeline.*
- We recognise that policies are currently being developed in relation to Multiple Legal Entities behind a single grid connection point, and Dynamic MECs. The design of the RESS is intended to be complimentary to other policy developments, it is not intended to limit or prohibit these developments from interacting with the RESS.

6. Evaluation Correction Factor (ECF)



- DECC intends to retain the approach to utilising technology specific ECFs in RESS 3 but is considering making adjustment to these values. It is proposed that the same ranges which applied in RESS 2 will be reconsidered:
 - *The ECF for wind will be set between 0.95 and 1.10,*
 - *The ECF for solar will be set between 0.85 and 1.05, and,*
 - *The ECF for non-variable technologies will be set between 0.95 and 1.0.*
- The range of ECFs may be further adjusted if the UAEC proposal is adopted.
- We are also considering the potential for implementing technology specific price caps, as a potential cost mitigation provision and to promote cost control and competition.

7. Bid Bonds/ Performance Securities



- No change is proposed to the level or format, €/MWh, of the Bid Bonds or Performance Securities in RESS 3.
- The proposed level of the Bid Bond is €6/MWh of Deemed Energy Quantity for one year. The proposed level of the Performance Security is €20/MWh of Deemed Energy Quantity for one year.
- The Bid Bonds and Performance Securities are within the range of EU experience.
- A minor amendment will be made to the conditions of drawdown on the Performance Security to the effect that if a RESS contracted project withdraws or terminates, the Department will trigger drawdown at that point in time rather than waiting for a default event at the next Milestone.

8. Price Cap Adjustment



- On balance, and reflecting the short term inflationary pressures noted above, DECC believes that the proposed amendments for RESS 3; the Availability Compensation arrangement, change in duration of support, and indexation provisions, should reduce the associated risks for auction participants and therefore offer price.
- DECC proposes to adjust the price cap to recognise these risk reduction measures.
- Final price cap will be determined by the responses to this consultation and an LCOE analysis which the Department is currently undertaking.

9. Community Category



- To simplify community participation in the Government's renewable energy ambitions, we are considering not including the Community Category in RESS 3 and instead providing support for eligible projects through the Small-Scale Generation (SSG) Scheme.
 - *The SSG is currently under development, the High Level Design is intended to be completed in Q1 2023, with the scheme expected to become available in 2023.*
 - *The SSG will take the form of a non-competitive scheme, with no interim delivery milestones.*
 - *Will support up to 1MW for all applicants, including renewables self-consumers, and up to 6MW for RECs.*
- From continued engagement with Renewable Energy Communities (RECs) on the design and operation of RESS, it appears that there are a number of significant challenges which REC projects face with the competitive nature of the RESS, including their ability to deliver Milestones on schedule and associated penalties for failing to deliver on time.
- We plan to provide an enabling framework for RECs* similar to that offered in RESS in the SSG.

9. Community Category Continued



- From early SSG stakeholder engagement and continued engagement with the existing RESS RECs, some parties expressed concern with the change to 100% community ownership for REC projects in RESS 2. RECs under the SSG must be 100% owned to remain state aid compliant.
- The 100% ownership provision does not preclude third parties from engaging with or assisting RECs in the development of their project, provided that it does not impact on the ownership structure.
- Collaboration between commercial developments and RECs should be viewed as a positive for both parties, and options for commercial developments to aid in the development and deployment of RECs should be explored.
- The RESS Community Enabling Framework provided by SEAI is a vital toolbox to aid the development of RECs. The experience of commercial developers would also be an invaluable tool to support RECs and build lasting relationships between those parties.

10. Directors Declaration



- Each Director's Declaration is required to be signed by a Solicitor.
- The Solicitor must be a practising Solicitor registered with the Law Society of Ireland, or equivalent, in their jurisdiction, and provide evidence as confirmation.
- Evidence must be provided by a link to or screenshot of their registration on the relevant country's list of practising solicitors.

11. Grid Co-Ordinates



- In both RESS 1 & 2, the “Irish Transverse Mercator” (ITM) grid co-ordinates required as part of the Application for Qualification resulted in a number of errors.
- To simplify the application process, the requirement for Applicants to specify their site location grid co-ordinates using the ITM system will be replaced by a requirement to specify grid co-ordinates using six-digit Eastings and Northings.

12. Consultation with Third Parties



- In RESS 1 & 2 applicants were required to: “complete letters addressed to the SEM, the Regulatory Authority and the relevant network operators as part of the application in the RESS 2 Auction (copies of which will included in the Qualification Information Pack)”.
- DECC intends to replace this requirement with a confirmation checkbox on the Auction platform authorising the Minister to correspond with these parties if necessary.

13. Shovel Ready Requirement



- A core response by Government and the EU to the war in Ukraine is to accelerate the roll out of renewable electricity projects.
- RESS has been designed for shovel ready projects which should be at a reasonably advanced stage of development to provide greater certainty that projects will progress to construction swiftly following the auction process.
- Applicants should have engaged with vendors and financiers, and should have a reasonably clear understanding of Capital Expenditure costs prior to their bidding in auction.
- DECC is considering implementing additional eligibility requirements to provide greater certainty on whether projects are shovel ready such as creating eligibility criteria that Applicants must demonstrate that they have engaged with panel / turbine providers and have indicative timelines / costs, and/or that they have approval in principle for their Performance Securities.

13. Shovel Ready Requirement Continued



- Consideration is being given to changing the eligibility requirements for RESS 3 to ensure that projects are closer to shovel ready. We propose to remove the underlined portion of the below requirement and to limit participation in the auction to projects which are in receipt of a grid offer.
 - *The RESS 3 Project must be (i) a Grid Contracted Project or (ii) an ECP Project that is eligible to be processed to receive a valid connection offer, in both cases with a capacity at least equal to the Offer Quantity of the relevant RESS 3 Project.*
- Conscious that this will prohibit ECP 2.3 projects from competing in RESS 3, DECC intends to publish an updated Future Calendar of Auctions before the end of 2022, and to open the RESS 4 auction in quick succession following publication of the Final RESS 3 results.

14. Adoption of DocuSign



- DECC is considering adopting DocuSign as an option of signing / countersigning RESS Implementation Agreements in addition to the existing physical document signoffs.
- This process should speed up the turnaround time for approvals for both the Applicant and DECC.

15. Reserved Rights of the Minister



- The Reserved Rights of the Minister will be updated to capture the Minister's ability to modify the RMax in addition to RMin and to add a new right:
 - *The right to modify or amend the Terms and Conditions at any stage prior to the Final Withdrawal Date in connection with changes or updates to legislation, regulatory decisions following the publication of these Terms and Conditions or other developments which may impact on the RESS 3 Auction.*

16. Ability to withdraw from RESS



- DECC is considering including in the RESS 3 Letter of Offer / Implementation Agreement a requirement that projects remain under the PSO for the duration of the term unless expressly authorised by the Minister.
- This proposal is being considered to provide greater certainty regarding projects remaining operational and providing longer term protection to consumers and investors from volatile fossil fuel prices.

17. CPPAs & Merchant Operation



- As set out in the CPPA Roadmap, RESS Design decisions for each RESS auction may provide levers to stimulate supply of CPPAs.
- A commitment under the CPPA Roadmap is to consider CPPAs in each RESS auction to potentially deliver lowest total costs for all electricity consumers. Similarly, some renewable projects may be prepared to operate on a merchant basis with limited or no PSO support.
- We welcome views on how RESS 3 could facilitate CPPAs in a way that align with CPPA Roadmap Principles.



Q&A

Please submit questions via the chat function.

Your questions will appear to all participants by default, but you can select to only send the message to the host (Paul McGoldrick) if you wish to remain anonymous.



Thank you