Imperfections Forecast 2020/21

Response to RAs' Consultation

14 August 2020

EIRGRID SONI

SONI and EirGrid welcome the publication of the Regulatory Authorities' (RAs) consultation on the Imperfections Charge 2020/21 and the opportunity to respond to same.

In its forecast EirGrid and SONI set out a requirement of €356.67m for the 2020/21 tariff year to cover the anticipated Imperfections Costs for the 2020/21 year along with a k-factor of €0.37m in accordance with Paragraphs 4.153 and 4.155 of the Trading and Settlement Code ("the Code"). The RAs have recommended a forecast allowance of €286.47, which is a reduction of €70.2m.

The proposed reduction in the Regulatory Authorities' consultation paper, and in particular the scale of it, is concerning. EirGrid and SONI would specifically note that no request was received from the Regulatory Authorities in the context of Paragraph 4.153 of the Code for the report prepared by EirGrid and SONI to include alternate values and it is EirGrid and SONI's considered view that the values now proposed by the Regulatory Authorities does not represent the best anticipated view of Imperfections Costs. It thereby contravenes the purpose of the report and the basis of the calculation of charges as set out in Paragraphs 4.155 and 4.156 of the Code. Indeed by providing that all of the risks as set out, a number of which would be expected to eventuate, are provided for not by way of provision in the tariff but through provision in terms of standby capital the Regulatory Authorities are effectively in agreement with this position – the best anticipated level of Imperfections Costs has not been provided.

EirGrid and SONI set out in this response why this is the case and respectfully request that, consistent with the Code, the Regulatory Authorities approve an Imperfections Charge consistent with the best view of anticipated Imperfections Costs as set out by EirGrid and SONI, the parties specifically charged with managing such costs.

EirGrid and SONI are particularly concerned regarding the implication as set out within the paper that the contingent capital facilities available to both EirGrid and SONI can be used to address anticipated shortfalls as opposed to simply those which are unforeseen or unanticipated. Again, it is EirGrid and SONI's considered view that this is inconsistent and would effectively breach the provisions as set out in the Trading and Settlement Code, would give rise to greater risk to market participants – the exposure to whom is ultimately backstopped under the Code – and would have adverse impact on the financeability of both the EirGrid and SONI business. This is particularly surprising given the parallel consultation papers by both the Commission for Regulation of Utilities and the Utility Regulator which examine the financeability of the TSO licensees. In neither paper is the additional risk associated with the need to provide additional contingent and drawn capital called out; indeed in the paper from the Utility Regulator examining the SONI business, the Utility Regulator specifically seeks to suggest that SONI may require less, as opposed to more, risk capital and seeks to reduce the level of contingent equity support. We would suggest that these positions, particularly that of the Utility Regulator, are mutually incompatible.

In addition to the inadequate provision which is less than that of the best view of anticipated costs specifically affecting EirGrid and SONI's financeability it is also detrimental to the efficient operation of the Single Electricity Market and to customers. Whilst, EirGrid plc and SONI Ltd have in place contingent capital facilities which are drawn to cover any revenue shortfalls as a result of carrying out their TSO and MO licensed duties. It is important to understand that these facilities are finite, and not a mechanism to facilitate in built shortfalls in revenue provisions with a view to smoothing the impact of tariff increases or for any other reason.

The under-recovery of imperfections revenues put significant pressure on these facilities in their first year of operation, and another under estimation of the required revenues as forecast by the TSOs run the risk of these being exhausted in 2020/21. If such an event looked likely the TSOs would need to seek an adjustment to the Imperfections Charge Factor in order to increase the Imperfections Charge at short notice. To be clear, in such an event, the increase via the Charge Factor would be significant. Such increases at short notice may have a detrimental impact on supply companies and ultimately consumers.
It is to no party's benefit to enter a tariff year with high levels of uncertainty around the scale of charges that will be applied over the course of the year, particularly supply companies who rely on timely information to allow them to plan for the year ahead.

Therefore, whilst we set out in our submission the basis for the proposed values in the remainder of this response we once again, in accordance with Paragraph 4.153 of the Code, set out the justification for the specific values as proposed.

We would specifically ask that should the Regulatory Authorities in their final determination seek that EirGrid and SONI provide for different values from those as set out by EirGrid and SONI that they would explicitly do so in the context of a request for the inclusion of alternate values in accordance with Paragraph 4.153 and that EirGrid and SONI would be given the opportunity to set out the arguments for and against such alternatives as provided for under the same Paragraph 4.153 of the Code. This is the architecture as set out within the Code; there is no other basis for deriving an Imperfections Charge for the forthcoming tariff year.

As per SEM-20-046 Imperfections Consultation Paper, the RAs have outlined a number of specific reductions they are minded to make to the forecast proposed by the TSOs.
In response to this consultation, the TSOs strongly advise that the following areas are not removed from the Imperfections revenue requirement:

- "*An inclusion of €30 million has been requested for additional risks which includes a €15m provision for a "must not run" TCG coming into effect on 25 May 2020. The RAs understand an allowance for "must not run" exists within the PLEXOS modelling and propose to exclude this item.*"

- The TSOs can categorically state that the Must Not Run Transmission Constraint Group[1] (TCG) has not been included in the PLEXOS modelling. Based on actual data since the Must Not Run TCG has been active, the TSO forecast estimate of €15m included in the supplementary modelling is now anticipated to represent an underestimate.
- Additional Risks: The TSOs consider it appropriate an allowance against additional risks in light of the increased volatility and risks associated with imperfections which are increasing year-on-year and a number of which would be expected to eventuate. It is only with the inclusion of this is that consistent with Paragraph 4.153 of the Code.

  On the basis that no Must Not Run TCG costs are in the PLEXOS model, and additional risks associated with Imperfections Costs, the TSOs advise that this provision of €30m should remain as part of the Imperfections revenue requirement.

- "*Provision of €19 million for the inclusion of NI Gas Transportation Charges (GTC). The RAs do not see evidence for an increase in this element and propose to exclude from the calculation*. "
  - The TSOs incremental cost relative to 2019/20 Forecast of €19m for GTCs is the additional costs for all relevant generators, both in IE and NI, and is not solely restricted to NI generators. The GTC values used in the PLEXOS model are derived from analysis of the actual commercial offer bids of each unit. The TSOs confirm that the GTC cost is an actual cost, as evident from analysis of actual bids. The TSOs strongly recommend that a provision of €19m should be included in the Imperfections revenue requirement to cover the units that currently include GTC charges in their offers.

- *"A forecast reduction in demand which has increased the PLEXOS model constraint costs by €14m. Acknowledging the significant reduction in demand at the height of the Covid crisis when the models were re-run, the RAs propose to now exclude this cost on the basis that the reduction in demand now appears to be less severe than used for the purpose of the Plexos model"*
  - The TSOs assumptions that go into the Imperfections Forecast are based on the best information at the time of data freeze. In addition, the demand currently used in the model effectively provides the lowest Imperfections Charge. If the TSOs were to increase the demand to the 2020 GCS Median Level, for example, it would actually increase Imperfections Costs.

- "*Provision of €11.6 million for the settlement of Pumped Storage units in the new market. The RAs do not consider there to be any change to the treatment of these units in the market since the previous exercise in which this amount was not fully allowed, and so propose to make a reduced supplementary allowance of €6 million, and would expect the TSOs to continue to strive to match the market position of the units in dispatch as closely as possible.*"
  - The TSOs strongly recommend that a provision of €11.6m should be included as there remains real associated costs with the settlement of pumped storage.

[1] As of 25 May 2020, a "must-not-run" TCG came into effect, which manages the equivalent operating hours for particular generators to minimise risks for margins across Winter 2020/21.

A detailed response to the adjustments proposed by the RAs is set out below:

Additional 2020/21 Risks

> *From* SEM-20-046 Imperfections Consultation Paper
> *"An inclusion of €30 million has been requested for additional risk including a €15m provision for a Must Not Run Transmission Constraint Group along with associated risks flowing from the Clean Energy Package, Brexit and COVID 19. In examining the PLEXOS models it appears that Must Not Run is already modelled within the constrained model. Regarding the other elements, while there may be risks in these areas they relate to variance in cost rather than an underlying expectation of cost. The TSOs have access to a substantial draw-down facility to cope with this variance should outturn cost not match expectation. The RAs therefore propose to exclude the entirety of this item."*

Must Not Run Transmission Constraint Group

The TSOs can categorically state that the Must Not Run Transmission Constraint Group (TCG) was not included in our submitted PLEXOS model.

The TSOs have seen a significant actual increase in Imperfections Costs since the introduction of the Must Not Run TCG in week 23 as shown in the graph below. The average weekly imperfection cost for the eight weeks since week 23 has been €5.5m, in comparison to an average of €3.1m for the eight weeks before week 23. This is an average weekly difference of €2.4m. In the forecast, it was assumed that this TCG would endure for 10 weeks in 2020/21 so an estimated impact of this using current actual averages would be €24m (€2.4m x 10 weeks = €24m). This is significantly greater than the original estimate the TSOs submitted of €15m.
On the basis that no forecast costs are in the PLEXOS model, and it is likely that the TSOs have underestimated the upcoming costs associated with the Must Not Run, it is imperative that an allowance of at least €15m is provided for.

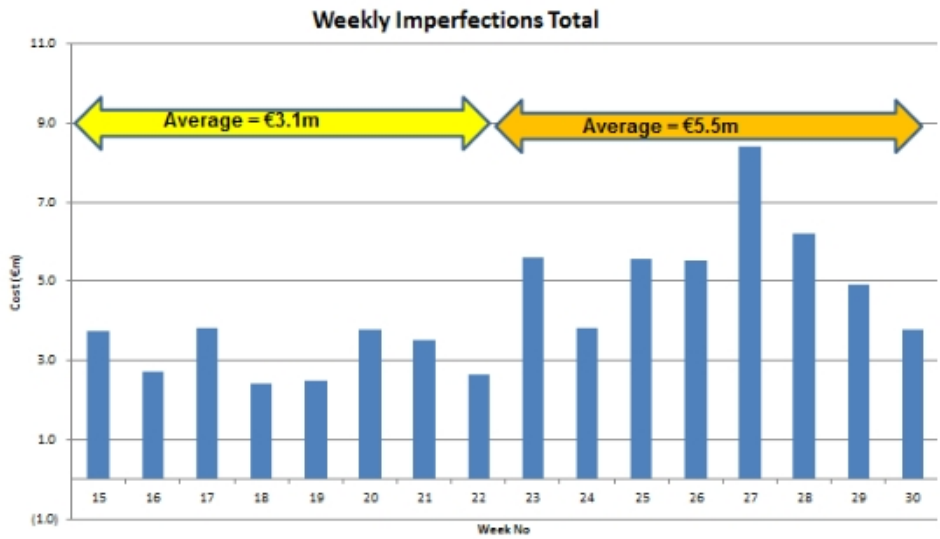

Figure 1: Variance of weekly imperfections totals upon introduction of Must Not Run TCG in Week 23, 2020.

Other risks - CEP, Covid, Brexit

- **Current Risk:** The volatility and risks associated with Imperfections is increasing year-on-year, even in the absence of Covid-19 risks. These risks include increased renewable penetration, network outages, fuel prices, gas transportation capacity charges, etc. Figure 2 below illustrates the increase in Imperfections Costs over recent years.

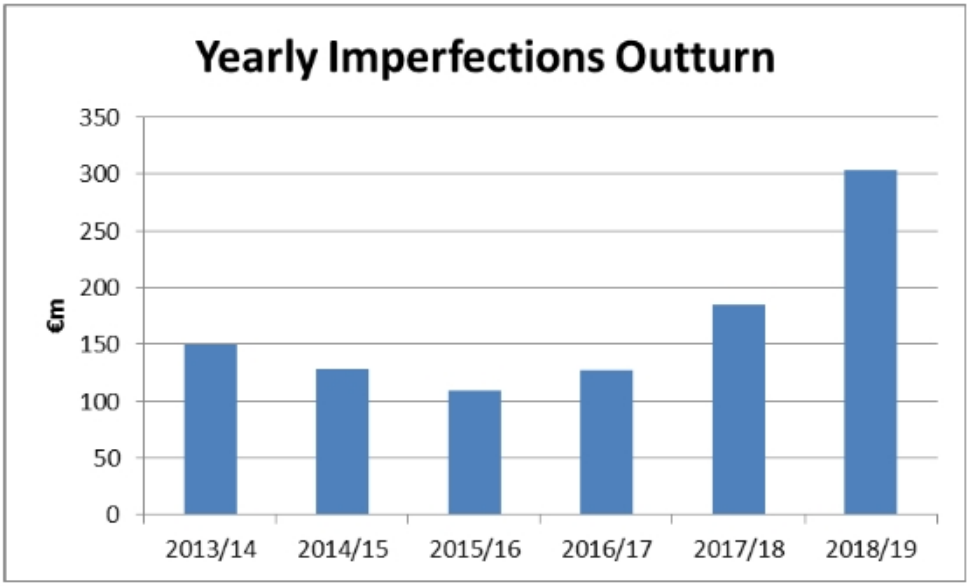

Figure 2: Yearly Imperfections Outturn

- **Increased Risk due to Non Provision of Funding for Constraint Cost Management:** EirGrid and SONI submitted separate price control submissions to CRU and UR respectively. The requested allowances were to deliver improved outputs and outcomes. The full ex-ante allowances have not been provided by both CRU and UR in the Draft Determinations. This places a further risk on the TSOs in relation to implementing initiatives to help mitigate increasing Imperfection Costs e.g. Control Centre Tools which help improve dispatch. Furthermore Covid-19, and the uncertainty surrounding this, has increased risks.

- **Credit Facility:** There is currently a drawdown facility in place for EirGrid and SONI for a combined €200m of contingent debt supported by contingent equity. This facility covers Imperfection Costs, DS3 System Services, capacity socialisation fund, residual error and foreign exchange variations. The maximum drawdown to date has been €130m. EirGrid and SONI are currently considering increasing the facility by a further €50m to cover increased uncertainty arising from Covid-19. This facility is in place to deal with risks over and above those currently known i.e. it cannot and should not be used to deal with risks that are appropriately factored into our original Imperfections allowance for 2020/21 in line with the provisions and requirements of the Code.

NI Gas Transportation Charges

> *From* SEM-20-046 Imperfections Consultation Paper
> *"Provision of €19 million for the inclusion of NI Gas Transportation Charges (GTC). The RAs do not see evidence for an increase in this element and propose to exclude from the calculation."*

The TSOs incremental cost of €19m relative to 2019/20 Forecast model for GTCs is the additional cost for all relevant generators, both in IE and NI, applying GTCs, and is not solely restricted to NI generators.

For Ireland (IE) units: to-date the RAs have always approved the GTC values of relevant IE units, in full. The TSOs are concerned about the inconsistent approach to the treatment of IE GTCs this year.

For Northern Ireland (NI) units: for three of the last five years the RAs have not approved GTC values for relevant NI units; for two of the past five years the RAs have approved the GTC values for relevant NI units. In all of the last five years the relevant NI units have included GTC in their bids and there is no indication that this will change in 2020/21.

The TSOs confirm that the GTC cost is an actual cost, as evident from analysis of actual bids. As the TSOs have received no evidence to suggest that the bidding behaviour of units including GTC in their offers will change, a provision should be made on this basis. The TSOs strongly recommend that a provision of €19m should be included as part of the Imperfections revenue requirement to cover the units that currently include the real cost of GTC charges in their offers.

Demand Reduction

From SEM-20-046 Imperfections Consultation Paper
"A forecast reduction in demand which has increased the PLEXOS model constraint costs by €14m. In examining the PLEXOS models the RAs observed a significant reduction in the level of assumed demand inside the model, in particular the value of the peak demand in RoI. This reduction is in apparent isolation to the 33.6TWh value proposed for the derivation of the tariffs discussed earlier. The RAs have observed a recovery of demand in both jurisdictions since April 2020 at the height of the crisis when demand had reduced year-on-year by in excess of 20%. With recent indicators showing a less pessimistic outlook for demand during 2021,the RAs propose to adjust this cost out of the total based, and will continue to liaise with the TSOs in more detail regarding the demand settings inside PLEXOS during the consultation period."

The TSOs' assumptions that go into the Imperfections Forecast are based on the best information at the time of data freeze, which was extended for the 2020/21 Imperfections Forecast, to take account of the impact of Covid-19. With regard to demand, this was determined by our technical experts who specialise in load forecasting, and the result was based on extensive analysis.

The TSOs contend that it is inappropriate to adjust just one assumption, which may have changed since the data freeze date, as many of the forecast inputs in the Imperfections model are subject to change, over time, since any data freeze date. The TSOs are of the opinion that it there is little merit in decomposing the model and changing a single input in isolation, it is the totality of the model that is the TSOs most accurate forecast.

In addition, the demand currently used in the model provides the lowest DBC. The TSOs re-ran the model using the 2020 Medium GCS demand and found that the model costs increased (see Figure 3) i.e. cost increased when demand increased. The TSOs are not seeking additional revenue in our favour to cover the cost of this change in input demand, as suggested by the RAs, as the TSOs remain of the opinion that it is inappropriate to adjust just one assumption, which may have changed since the data freeze. The TSOs do however recommend that no deduction is made for this category.

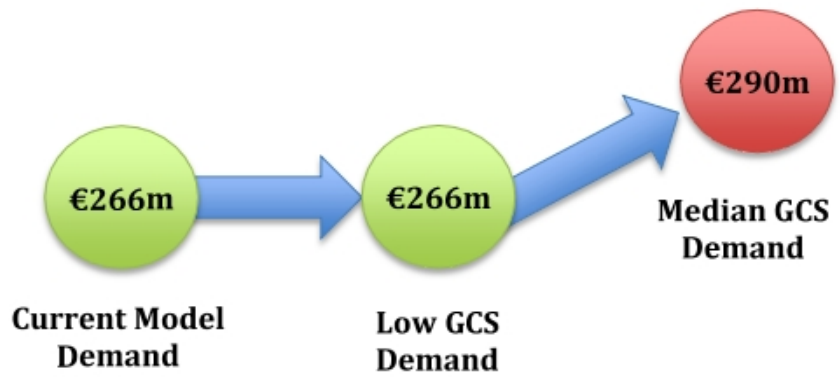

Figure 3: Variation of 2020/21 Forecast Cost with demand levels

Pumped Storage

From SEM-20-046 Imperfections Consultation Paper
"Provision of €11.60 million for the settlement of Pumped Storage units in the new market. While the RAs acknowledge the treatment of these units in PLEXOS differs from the new market, we note that the PLEXOS models already include a gap between the efficiencies, with the unconstrained and constrained set to 70% and 48% respectively. The RAs propose to make a reduced allowance for this element in keeping with the decision for 2019-20 and propose an allowance of €6 million, and would expect the TSOs to strive to match the market position of the units in dispatch as closely as possible."

The TSOs would like to clarify that the provision of €11.6 million is requested to cover settlement costs, CPREMIUMS and CDISCOUNTS in particular, which have occurred to date under the revised market arrangements. This is separate to the station efficiency modelling, which has been included in the PLEXOS model for the last few years. The efficiency in the model only represents unit dispatch, however the big difference under the revised market arrangements is that the units submit commercial offer data and their PNs are determined by how they clear in the day ahead market. The current PLEXOS model is not set up to include these factors and therefore a separate provision is required to manage the settlement costs of these units, based on how they are scheduled in the market systems.

The TSOs would like to point out that they always strive to match the market position of the units in dispatch as closely as possible. However, the scheduling software takes into account the Physical Notifications, offer prices and technical capability of each unit in its optimisation and the TSOs are bound by these parameters. See table below indicating actual costs to date versus the proposed allowance. There is a notable difference, and will result in an Imperfections Cost shortfall. The TSOs strongly recommend that a provision of €11.6m should be included as there remains a real associated cost with the settlement of pumped storage, and this will continue.

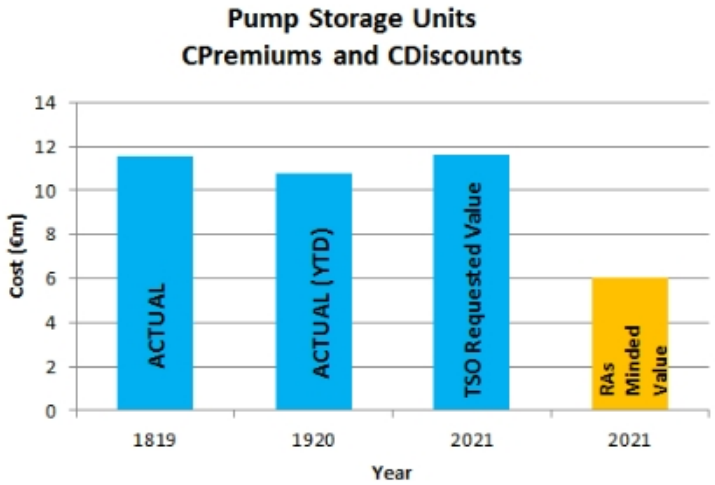

Figure 4: Actual Premiums and Discounts for Turlough Hill

Interconnector Ramp Rate

From SEM-20-046 Imperfections Consultation Paper
"Interconnector Ramp Rate Disparity forecast, €1.6m –The RAs have not been persuaded that this effect leads to an expected loss (i.e. a bias in the financial exposure to balancing during ramping) and consider this to be a volatility issue. The RAs are minded that this element has not been shown to be an underlying expected cost, but rather a cost that can vary either positively or negatively during the Year and recommend a €0 allowance."

The TSOs have previously stated that material imperfections volumes and costs will arise as a result of the way Euphemia interprets Interconnector Ramp Rates versus how Interconnectors ramp in reality. We note the RA proposal to make no provision for these costs; the TSOs will closely monitor these costs as a provision may be required in the future based on further market experience.