

Single Electricity Market (SEM)

Trading and Settlement Code Scheduling and Dispatch Parameters 2023 Decision Paper

SEM-22-078 12 October 2022

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1. Introduction

Under Condition 10A of EirGrid's Transmission System Operator (TSO) Licence, and Condition 22A of SONI's Transmission System Operator Licence, the System Operator (SO) is required to report to the Regulatory Authorities (RAs) proposing values for parameters to be applied in the Scheduling and Dispatch process.

In June 2022 the RAs requested the TSOs to review the following parameters utilised in Scheduling and Dispatch:

- 1. Long Notice Adjustment Factor (LNAF)
- 2. System Imbalance Flattening Factor (SIFF)

On 27 July 2022, the RAs received a report from the TSOs outlining their recommendations for the proposed values for the above parameters. The RAs then published a consultation on 17 August 2022 (SEM-22-053) on the TSO's recommendations. This paper presents the SEM Committee's decision in relation to these parameters considering stakeholder comments, and is structured as follows:

Section 2: provides an overview of LNAF and SIFF.

Section 3: outlines the TSOs' proposal for 2023.

Section 4: provides a summary of respondents' comments.

Section 5: provides the SEM Committee's response to the feedback.

Section 6: details the SEM Committee's decision.

Section 7: outlines next steps.

2. Background

The consultation paper (SEM-22-053) explained that LNAF and SIFF give effect to the objectives of Scheduling and Dispatch from the market design decisions, in particular, balancing the trade-off between 'early' energy-balancing actions and the cost of non-energy actions. LNAF is a multiplier applied to the start-up costs of Generator Units, which increases with increasing length of notice provided in any instruction to synchronise. SIFF is another multiplier applied to the start-up costs which reduces with reducing forecast system imbalance. The LNAF and SIFF terms are defined in the table below. The definitions are as outlined in the SONI and EirGrid Transmission Licences.

Term	Definition		
LNAF	Long Notice Adjustment Factor – A multiplier		
	applied to the start-up costs of generation		
	sets which varies depending on the length of notice provided in any instruction from the Licensee to synchronise such generation set		
	and which has greater values for greater		
	lengths of notice.		
SIFF	System Imbalance Flattening Factor – A		
	multiplier applied to the start-up costs of		
	generation sets which varies depending on		
	the degree to which forecast generation		
	including forecast imports and forecast		
	exports on Interconnectors is short of		
	forecast demand and which has greater		
	values for greater shortages.		

The consultation paper further explained that under Condition 10A of EirGrid's Transmission System Operator (TSO) licence, and Condition 22A of SONI's TSO licence, the TSOs are required, when directed to do so, to report to the Regulatory Authorities (RAs), proposing values for parameters to be applied in the Scheduling and Dispatch process.

3. TSO Proposals

The TSOs' report sets out the proposed values of LNAF and SIFF and the methodology for applying them in the scheduling tool. The TSOs have carried out a review of the scheduling processes based on the intent of the LNAF and SIFF parameters. The review focusses on the parameters in the context of current security of supply concerns, new operational trials and audit outcomes.

The LNAF applies a weighting to the costs of offline generators to reduce the likelihood of the scheduling tools recommending early commitment actions in the scheduling process. A value of zero for both LNAF and SIFF means there would be no additional weighted costs applied to offline generators and therefore no additional cost to the TSOs taking 'early' actions. Conversely, non-zero values of LNAF and SIFF would disincentivise the TSOs from taking 'early' energy balancing actions but may also increase the cost of non-energy actions. The intention with non-zero values of LNAF and SIFF would be to prevent the TSOs from taking actions on units prior to gate closure for energy balancing reasons. Such actions could foreclose the ability of participants to trade in the still-open intraday marketplaces to reduce energy imbalances.

The TSOs note that one of the risks of assigning a non-zero value of LNAF and SIFF is the potential impact on securing the system as the few available offline long-notice units would run less, be in cooler heat states and thus less reliable to start when required. If some abnormal events occur such as tripping of a large unit, non-zero LNAF and SIFF would increase the reliance on the fewer short notice units that are not already committed. It would increase the risk of not meeting the demand requirements during start up periods of the long-notice units that are in cooler heat states, when they are called to replace the original tripped unit which could lead to a potential system alert.

The TSOs' analysis also notes that since 31 December 2020, the day ahead market does not include any GB-SEM interconnection capacity. Due to this, the TSOs do not receive day ahead interconnector schedules for Moyle and EWIC. To mitigate the risk that imports to SEM are not scheduled in the Intraday markets at time of tight margins, the TSOs assume zero flows on the interconnectors in the day ahead scheduling. This may sometimes result in the TSOs scheduling the commitment of an additional long-notice unit. The TSOs point out that this procedure has a greater significance than what was envisaged during the design of the LNAF and SIFF parameters.

Another finding from the analysis carried out by the TSOs relates to the fact that a number of transmission constraint groups (TCG's) have been put in place to manage tight generation margins over the last few years to improve the likelihood that generation is available during the period of peak demand for conventional generation. The TSOs' view is that these interventions are more significant and direct than the intent of LNAF and SIFF, and that non-zero LNAF and SIFF would not be used as an alternative to these interventions.

Based on the analysis carried out by the TSOs, the consultation paper proposed that the LNAF and SIFF values remain unchanged from last year, at zero. This is summarised in the table below.

Parameter	Approved Value for 2022	TSOs' Proposed Value for 2023
Long Notice Adjustment Factor	0	0
System Imbalance Flattening Factor	0	0

4. Respondents' Comments

General Overview

We have received two responses to this consultation¹, with both the respondents agreeing with the proposed values contained within the consultation paper.

Summary of Responses

Bord Gáis Energy (BGE) supported the proposed zero values of the LNAF and SIFF parameters for 2023. The respondent noted that in principle LNAF and SIFF should be non-zero given that was what was expected when they were being considered in the market design process. The respondent also noted that the impact of any non-zero value might be to increase the likelihood of long notice units being unavailable during low wind and add to interconnector uncertainty such that it would increase the risk of having no back up available for Intraday markets. BGE also acknowledged that introduction of any non-zero value may worsen the current security of supply risks by increasing uncertainty around generator choice and reliability, particularly when there is low or variable wind.

Energia recommended keeping LNAF and SIFF at zero for 2023 since "no justification or supporting evidence has been provided for introducing any changes at this time and as such it is prudent to keep these parameters at zero and review again at a future date".

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¹ Bord Gáis Energy, Energia

5. SEM Committee Response

The SEM Committee acknowledges the comments raised by BGE and Energia in response to this consultation and is cognisant that in principle LNAF and SIFF should be non-zero as was intended in the market design process. However, the SEM Committee is also conscious of the increased risk to security of supply of applying non-zero values of LNAF and SIFF, as highlighted by the TSOs in their analysis and BGE in their response to the consultation paper.

Having considered all the responses to this consultation and evaluation of the TSOs' submission, the SEM Committee has decided that retention of the existing LNAF and SIFF parameter values is a prudent approach at this time, given concerns regarding security of supply.

6. SEM Committee Decision

A summary of the decision made by the SEM Committee in relation to the LNAF and SIFF are displayed in Table 1.

Parameter	Current SEM Value	TSOs' Proposal for 2023	SEM Committee Decision
LNAF	0	0	0
SIFF	0	0	0

Table 1: LNAF and SIFF Values for 2023

7. Next Steps

These parameters will apply from 1st January until 31 December 2023. A consultation will be carried out in 2023 to determine the values to apply from January 2024. The Trading and Settlement Code provides for the RAs amending the values of parameters where necessary outside the normal parameter-setting process. While this would only arise in exceptional circumstances, the SEM Committee has obligations to balance regulatory certainty with ensuring that no unnecessary consumer harm arises. On this basis, the RAs will keep these parameters under observation and may propose changes in the interim, if necessary, via consultation.