

KEEP ENERGY PRICES DOWN, INDUSTRY IN, COMPETITION HIGH, MANIPULATION OUT EUROPE – A DECADE WITH THE REGULATION ON THE WHOLESALE ENERGY MARKET INTEGRITY AND TRANSPARENCY (REMIT)

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ABSTRACT

Next year we are going to mark the 15th year of application of the EU Regulation No 1227/2011, designed to ensure integrity and transparency in the wholesale energy markets. It is high time to address the legal experiences of it, and its effect to the market, how it achieved partly or entirely its declared goals, to detect, deter and sanction market manipulation and insider trading, in order to better protect EU citizens and enterprises from market abuse. This article tries to sum up REMIT's working experiences and enlighten its functioning through real life cases from its past present.

53

KEYWORDS

REMIT; insider trading; market manipulation; wholesale energy products.

ARTICLE HISTORY

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I. Introduction

Before getting into details, it is worth walking through the reader, on what were exactly the key elements, of REMIT, which on the analogy of stock market trading rules, started to regulate wholesale energy trading in Europe.¹ Key elements were: banning insider trading (Art 3), market manipulation (Art 5) mandatory publication of inside information (Art 4) transaction reporting (Art 8) market surveillance by ACER (Art 7).

The 2024 reform - Regulation (EU) 2024/1106 of the European Parliament and of the Council of 11 April 2024 amending Regulations (EU) No 1227/2011 and (EU) 2019/942 as regards improving the Union's protection against market manipulation on the wholesale energy market - expanded scope (storage, financial instruments), strengthened ACER investigatory powers for cross-border cases, and algorithmic trading oversight.²

The enforcement framework of REMIT is quite simple, ACER at EU level monitors data, flags anomalies, coordinates national authorities, and takes actions as necessary, in cooperation with NRAs. But its main role is to hand down cases to the National Regulatory Authorities, NRA-as to further investigate and sanction cases discovered by ACER.³ It is mostly the National Regulatory Authorities (NRAs) which take action and enforce sanctions, fine violators, sometimes issue warnings.

Enforcement powers vary across member states. In the Czech Republic, energy insider trade is a crime, so investigators of an NRA go out to house search accompanied by the Police and K9 unit dogs, and the result of their investigation will land on the desk of a state prosecutor. In Hungary it is not a criminal offence yet (differently from crimes of the financial market⁴) The table below demonstrates,

¹ Rushkovskiy, M. and Rasshyalov, D., 'European Remit Regulation As The Latest Determinant Of Corporate Risk Management Strategies In Energy Sector' (2022) 3 (1) Green, Blue and Digital Economy Journal 40-46. <https://doi.org/10.30525/2661-5169/2022-1-7>

² Ratliff, John and Mariia Shulha, 'Amendments to REMIT in 2024.' EU Energy Law Volume X: Energy Market Manipulation and Insider Trading Law in Europe-REMIT (Edward Elgar Publishing 2025) 877-904. <https://doi.org/10.4337/9789077644225.00035>

Berceanu, Ionuț Bogdan, Mihaela Victorița Cărăușan and Alina Zorzoană. 'The Regulation of Market Manipulation in the EU Energy Sector: Doctrinal Analysis of REMIT II's Sanctioning Framework.' (2025) 14(5) Laws 61. <https://doi.org/10.3390/laws14050061>

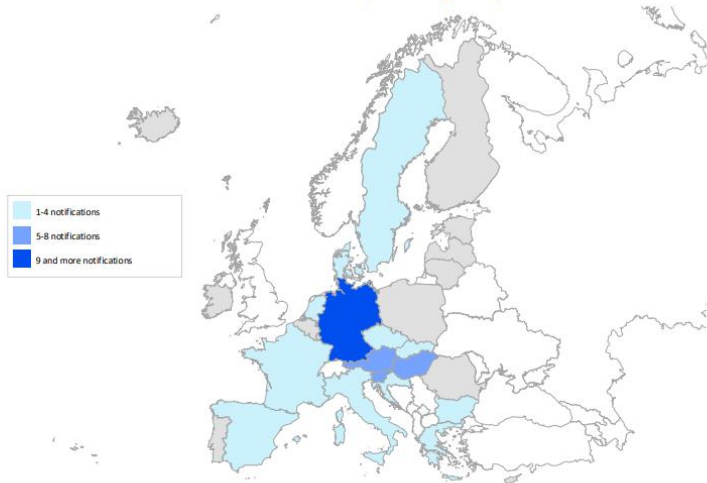
³ Godin, Jean-Theodore, Manon Polet and Arthur JAMAR DE BOLSEÉ, 'Implementing REMIT: What a Legal Analysis Tells about the (Regulatory) Role of ACER.' (2018) 9(2) European Journal of Risk Regulation 192-207. <https://doi.org/10.1017/err.2018.17>

⁴ „Hungarian Criminal Code: Insider Trading Section „410§ (1) Any person who a) uses inside information to conclude a transaction, give an order to conclude a transaction, withdraw or modify an order, record, withdraw or modify an offer, in his own name or in the name of another person, in a financial instrument affected by the inside information, or who, with regard to the inside information in his possession, invites or compels another person or persons to conclude a transaction, give, withdraw or modify an order to conclude a transaction, record, withdraw or modify an offer, shall be punished by imprisonment for a term not exceeding three years.”

that the Central European area, and bidding zones therein are the playground of a vivid commodity trading, but also suspicious market manoeuvres⁵.

Figure 1: Concentration of ACER notification shared with NRAs per receiving country.

Figure 7: Concentration of ACER notifications shared with NRAs per receiving country



Source: ACER, REMIT data (2025).

Source:

https://www.acer.europa.eu/sites/default/files/REMIT/REMIT%20Reports%20and%20Recommendations/REMIT%20Quarterly/REMITQuarterly_Q1_2025_2.0.pdf

What are the major types of market abuse, that REMIT covers? From cases and ACER now the 6th time updated guidances we can say that there are five major types of them.

The first is capacity hoarding/withholding – which is in other words trading against itself to block capacity. By definition it is the acquisition of all or decisive part of the available transmission capacity (ATC) without using it or without using it effectively. ACER gave out its first Guidance on it in 2018⁶, where

⁵https://www.acer.europa.eu/sites/default/files/REMIT/REMIT%20Reports%20and%20Recommendations/REMIT%20Quarterly/REMITQuarterly_Q1_2025_2.0.pdf

⁶<https://www.acer.europa.eu/sites/default/files/REMIT/Guidance%20on%20REMIT%20Application/ACER%20Guidance%20on%20REMIT/Guidance%20Note%20-%20Transmission%20Capacity%20Hoarding.pdf>

it described in great detail, what is the nature of this type of market abuse. From the Guidance we know that „The transmission capacity is considered used effectively when it is used to fulfil a legitimate need of the market participant driven by the (expected) supply and demand of electricity in the different bidding zones”. It makes a great difference what was the reason for you to buy this capacity. You buy it to prevent others from using it or to create or enhance a price difference between two bidding zones, or there was a real need for it?. It is also important to know, that intraday capacity markets work on the first come first served basis. So if you are quick to react, you may buy the decisive part of the available transmission capacity, ATC. There are two ways of buying capacity: one can actively match its own order or the system will match you when a new capacity occurs. It is though very important for traders to prove real capacity need at the given time. ACER has got triggering indicators on that. First there must be price difference between the bidding zones. Second: what was the portion of the acquired capacity. Third: time difference between the transactions. Fourth: if there was direct or indirect reversal, use of wash trades, applying inconsistent orders. Today NRA-s and ACER have a great experience on judging these small, but important differences.

Withholding can be two types. Physical or commercial. Physical is to not offering or limiting without justifiable cause available electricity or gas production, storage or transportation capacity on the market by market participant with the relative ability to influence the price or the interplay of supply and demand of a wholesale energy product. Economic or commercial is offering available generation capacity but at prices which are known to be above the market price and do not reflect the marginal cost (including opportunity cost) of the market participant's asset, which results in the related wholesale energy product not being traded or related asset not being dispatched.⁷

Wash trading is in other words – self-matching orders. In wash trading the seller and the buyer is the same person, in most cases hidden behind seemingly different market participants. It works as that one is selling and buying its own energy product from itself, and the false perception of trade is urging prices up. This practice applies different accounts or brokers to create a false impression of market activity. It will mislead honest brokers about the demand for the product (high trading volume and liquidity) and will inflate its price.

Marking the close / layering / spoofing – placing fake orders to influence price or settlement. Under that method a market participant issues a false order to influence other market participants' behaviour, e.g. by creating the impression that there is a stronger selling or buying interest at decreasing/increasing price levels than there actually is (non-genuine orders are issued in order to enter into transactions at better conditions regarding price or volume on the other side) So

⁷ Zani, A., Spisto, A., Vitiello, S., Grisi, P., Siface, D., Gelmini, A. and Geracitano, A., 'Case studies analysis of REMIT regulation' in *2020 17th International Conference on the European Energy Market (EEM)* (IEEE 2020) 1-5. <https://doi.org/10.1109/EEM49802.2020.9221989>

transaction(s) on the other side of the book will occur within a period that allows the false orders to influence the behaviour of bystander market participants, than miraculously the false orders are cancelled shortly after the entering into one or multiple transactions on the other side of the order book by the real players⁸.

Marking the close is a specialty: it is buying or selling wholesale energy products deliberately at the close of the market in with a view to modify the exchange's daily closing price (on any individual trading day or on particular dates such as future/option expiry dates or quarterly/annual portfolio or index reference/valuation points). It is mostly done with minimal tradable amounts.

False or misleading information – it is misrepresenting supply/demand to manipulate balancing markets. This is done by a market participant posting information via internet, electronic or printed press or issuing a press release which contains false or misleading statements about a wholesale energy product which is admitted to trading on an organized market (Exchange), where the disseminating person knows, or ought to know, that the information is false or misleading, so it is willfully done.⁹

For example, when a TSO provides incorrect information on the transmission capacities on the interconnector to the dayahead auction or submitting by a producer of balancing mechanism to TSO false or misleading notifications which falsely estimate expected generation for a time period (mostly at the high demand periods, when prices are high) in order to induce the TSO to pay participant to generate or submitting to TSO misleading (inflated) information on the minimum amount of power that generation plant can supply.¹⁰

Insider trading is also one of the most common infractions of the REMIT. It can only be committed by persons with insider information. These persons shall not use that information for buying or selling wholesale energy products, disclose that information to anybody not needed to know, or recommending or inducing another person to buy or sell.

Failure to disclose inside information means that market participants shall publicly disclose in an effective and timely manner inside information which they possess in respect of business or facilities which the market participant concerned.

Such information must include relevant information to the capacity and use of facilities for production, storage, consumption or transmission of electricity

⁸https://www.acer.europa.eu/sites/default/files/REMIT/Guidance%20on%20REMIT%20Application/ACER%20Guidance%20on%20REMIT/Guidance%20Note_Layering%20v7.0%20-%20Final%20published.pdf

⁹ Ratliff, J., and Nteve, M., 'Market Manipulation Under Remit-Key Concepts And Developing Enforcement Practice' (2020) European Energy & Climate Journal (Claeys & Casteels BV) 9. <https://doi.org/10.4337/eej.2020.02-03.07>

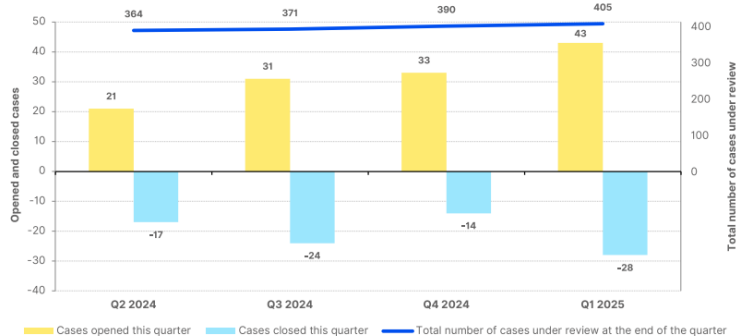
¹⁰ Ratliff, John, 'REMIT in the United Kingdom' *EU Energy Law Volume X: Energy Market Manipulation and Insider Trading Law in Europe-REMIT*. (Edward Elgar Publishing 2025) 695-729. <https://doi.org/10.4337/9789077644225.00031>

or natural gas or related to the capacity and use of LNG facilities, including planned or unplanned unavailability of these facilities, as all these information have got a direct effect to the market, to trade. But there can be cases, exceptionally for delay. In such cases ACER and the NRA must be informed, with reasoning. The table below demonstrates the constant growth of REMIT investigation cases, accumulated during pas periods before 2024, and handled this year¹¹.

Figure 2: Potential REMIT breach cases – quarterly statistics.

ACER - REMIT QUARTERLY REPORT 2025

Figure 4: Potential REMIT breach cases – quarterly statistics



Source: ACER (Case Management Tool).

Source:

https://www.acer.europa.eu/sites/default/files/REMIT/REMIT%20Reports%20and%20Recommendations/REMIT%20Quarterly/REMITQuarterly_Q1_2025_2.0.pdf

II. Case Studies

1. Case Study: Energi Danmark – Capacity Hoarding and Market Manipulation

Energi Danmark,¹² a major Danish energy trading company, was investigated and sanctioned for a case of market manipulation involving cross-border capacity hoarding and wash trading. This was one of the first fully adjudicated and public REMIT enforcement actions in Denmark, providing a precedent for how such

¹¹https://www.acer.europa.eu/sites/default/files/REMIT/REMIT%20Reports%20and%20Recommendations/REMIT%20Quarterly/REMITQuarterly_Q1_2025_2.0.pdf

¹² <https://forsyningstilsynet.dk/nyheder/2018/dec/energi-danmark-pays-fine-for-manipulation-with-the-electricity-market>

conduct is interpreted and penalized under REMIT (EU Regulation No. 1227/2011).¹³

The manipulation occurred on 29 July 2015, during a time of routine operations in the Nordic electricity markets. The Nordic power market is highly interconnected, with cross-border transmission playing a critical role in price formation. Transmission system operators (TSOs) allocate cross-zonal capacity for electricity traders, who may profit from arbitraging price differences between bidding zones (e.g., between Denmark and Sweden).

Energi Danmark engaged in a wash trading scheme involving matched buy and sell orders across interconnectors. Specifically, artificial self-trading: The company placed identical buy and sell orders for electricity across two bidding zones, effectively trading with itself at the same price and volume.

It was also blocking cross-border capacity: These fictitious transactions occupied capacity on the DK1-SE3 (Western Denmark–Sweden) interconnector, preventing other market participants from accessing the transmission line. By using capacity without genuine economic interest in the trades, Energi Danmark manipulated the price spread between the two zones, profiting indirectly through other open positions.

This behavior was qualified as market manipulation under Article 5 of REMIT, and more specifically the blueprint example outlined in ACER's Guidance on Market Manipulation (e.g., capacity hoarding, wash trades, and the creation of a misleading impression of supply and demand).

The Danish national regulator, Energitilsynet (now part of the Danish Utility Regulator), received the initial report and referred the matter to ACER for technical analysis. ACER's REMIT surveillance system, which continuously monitors reported trade data (via Registered Reporting Mechanisms, or RRM)s, flagged unusual patterns suggesting circular trades. The investigation revealed that the trading pattern could not be explained by legitimate hedging or portfolio optimization purposes.

Energi Danmark's first offense occurred in 2015, and the company was fined in December 2018, for DKK 750,000 (100 000EUR) capacity hoarding and wash trading on 10 occasions, than on 3 January 2020, Energi Danmark was again fined for DKK 380,000 (approx. €50,900) by the Danish Utility Regulator.

The company made a profit of DKK 80,693 (approx. €10,800) from the manipulation. The regulator found Energi Danmark in breach of Article 5 of REMIT and relevant Danish legislation implementing the regulation. It is also

¹³ Lakić, E., Jeriha, J., Medved, T., Vučić, D., Topić, D. and Knežević, G., 'Unveiling market manipulation in EU energy markets-Insights from ACER enforcement cases' in *2025 21st International Conference on the European Energy Market (EEM)* (IEEE 2025) 1-6. <https://doi.org/10.1109/EEM64765.2025.11050114>

important to mention that the recurrence raised concerns about the deterrent effect of fines at the time in Denmark.¹⁴

This was one of the first cases to demonstrate how REMIT can be used to target subtle forms of cross-border manipulation that distort price signals.

Very important is the ending of the case. Energi Danmark did not appeal it. They accepted the fines, and the criminal case was closed at the prosecutors desk.

The case clarified that self-matching cross-border trades, even without direct profit from the wash itself, can constitute market manipulation if they hinder fair access or influence prices. It also marked a transition in Danish enforcement from purely administrative penalties to active use of REMIT's market integrity provisions. The Danish regulator published the rationale for its decision, providing transparency in a field where many cases remain undisclosed or settled privately.¹⁵ But, it had one major consequence for the future: The penalty-to-profit ratio (less than 5:1) raised concerns about the adequacy of enforcement deterrence. Critics argued that fines should be proportional not only to the gain but also to the potential market impact and recurrence.

Following this case and others like it, ACER and national regulators have since pushed for stronger penalties, more consistent enforcement across member states, and the creation of public registers of sanctions to increase transparency.

The Energi Danmark case illustrates how even modest manipulations in the electricity market can disrupt pricing efficiency and harm market confidence. It also reveals the challenges regulators face in detecting and deterring abuses in a rapidly evolving and technically complex trading environment.

2. Case Study: Spain – Gesternova and Axpo Iberia (2022)¹⁶ Stuffing and Marking the Close in Wholesale Energy Markets

Between 30 September and 30 December 2022, the Spanish national regulator, CNMC, discovered that two major participants in the intraday electricity market (the non-interruptible intraday segment of the Iberian electricity grid) manipulated order books on cross-border interconnectors with France by using quote stuffing tactics: rapidly placing and canceling orders to obstruct fair competition and secure priority in transaction execution.¹⁷ What is quote stuffing? The latest version (2024) of

¹⁴ Ratliff, J., & Nteve, M., 'Market Manipulation Under Remit-Key Concepts And Developing Enforcement Practice' (2020) *European Energy & Climate Journal (Clays & Castells BV)* 9.

¹⁵ Balázs Hohmann, 'The Interpretation of Transparency from the Legal Point of View' in Tamás Haffner (ed), *4th Youth in Europe Conference – Proceedings* (Sopianae Cultural Association 2018)

Balázs Hohmann, 'The Principles and Fundamental Requirements of the Transparency on the Public Administrative Proceedings' in Suresh P (ed), *Proceedings of the IIER International Conference*, Dubai, UAE (International Institute of Engineers and Researchers 2019)

¹⁶ <https://www.cnmc.es/sites/default/files/5698012.pdf>

¹⁷ Bernabeu Villena, J., 'Análisis prospectivo de la demanda energética residencial e implementación de medidas de adaptación al riesgo de shock de precios' (2023)

ACER Guidance on the Application of REMIT says at its section 6.3.2. (315) „i) Quote stuffing: entering a large number of orders to trade and/or cancellations and/or updates to orders to trade so as to create uncertainty for other participants, slowing down their process, and/or to camouflage one’s own strategy;”

It could only work by AI, by computer robots. An algorithmic order bombardment was used by Gesternova S.A. and Axpo Iberia to flood the intraday market with false sell orders. These non-genuine orders—and their cancellations—slowed down or prevented other participants from securing advantageous queue positions. And as markets across France and Spain link at specified times, quotes placed earlier in the queue executed first, it enabled Gesternova and Axpo to capture favorable trades across the border.

„During the months of October, November, and December 2022, the broker GESTERNOVA S.A. had placed a high number of new bid submissions before the opening of trading in the non-interruptible intraday for the next-day contracts (which occurs at 3:10:00 p.m.). These submissions were invalid and were intended solely to monopolize the bid processing queue to be the first to have a valid bid in the next-day contracts (hereinafter D+1). According to the market rules in force at that time, "Hibernated bids will be reactivated in the order in which they arrive on the Market Operator's Trading Platform" (Rule 46.2.7). Therefore, competition among agents occurred around 3:10 PM until March 3, 2023, since the objective was to have priority in reactivating bids after the third session of the intraday market auction (session closing at 9:50 PM) for execution with purchase bids for the D+1 product (at 10:00 PM). Specifically, by cornering the bid processing queue, the agent sought to position itself first in the entry order to execute its sell bids by attacking purchase orders external to the Iberian market, while the bids were reactivated based on the order in which they arrived at OMIE's trading platform, known as LTS (Local Trading System), and therefore, their validation.” (excerpt translation from the original Spanish decision)

„The proven facts show that between September 30 and December 30, 2022,¹⁶ GESTERNOVA manipulated the organized electricity market by bombarding the processing queue with a high volume of non-genuine bids or bids with no intention of execution—which were rejected by the system (97.8% of GESTERNOVA's total bids during the investigation period). The sole intention was to monopolize the bid processing queue, preventing other agents' orders from being placed before its own or interspersed with its own, thus allowing GESTERNOVA to obtain an advantageous position over other agents in the D+1 product bid. The LTS bid bombardment strategy allowed GESTERNOVA to

position 21.6% of the bids validated as of 3:10:00 PM for the D+1 product at the top of the MIC bid book.”

The CNMC cited breach of Article 5 REMIT, specifically concerning the issuance of false or misleading signals about supply via deceptive order book behavior.

In the end, Gesternova was fined by CNMC to 6 million EUR, and Axpo Iberia received a 1.5 million EUR sanction fine¹⁸ - underscoring that quote stuffing, though subtle, carries major consequences when network integrity is jeopardized.”

Spain has got no natural gas on its European territory. Never had. All its natural gas is imported in the form of liquid natural gas aka LNG into LNG terminals, where, after regasification it is transmitted to the national pipeline system and mostly used for balancing electricity power production in CCGT gas power plants. We can say, that natural gas trade is directly connected to the electricity market. That is why this gas market manipulation case had so serious consequences to the committing company, Enérgya VM Gestión de Energía in 2022.

The essence of the case is that the spanish energy regulatory authority, the National Commission on Markets and Competition (CNMC) has fined Enérgya VM Gestión de Energía, S.L.U. one million euros for manipulating the organised gas market (MIBGAS) between 1 September and 31 December 2022 (**SNC/DE/002/23**).

62

The authority found that its „operation was illegitimately aimed at raising the market price to an artificial level by inserting purchase offers that he had no intention of matching. In 32 trading sessions, it submitted purchase offers at high prices in the last seven seconds of trading. These were not modifications of previous offers, which it was trying to execute in the last seconds of the negotiation, nor did they attack the most competitive sale offer at that time in the negotiation system, since it introduced them at a slightly lower price – in some sessions only €0.02/MWh below – to prevent them from being matched.

In addition, these purchase offers were entered for a volume of energy much lower than the volume of the rest of the purchase offers of Enérgya VM Gestión de Energía, S.L.U. in the same market session. The objective was to reduce the economic impact of the high-priced offers in the event that they had been matched and, in some of the sessions, against economic logic, since it introduced them at a higher price than the last transaction executed by the agent as a selling counterparty for the same product and in the same trading session.

None of these bids were matched, but the final price of the D+1 product was altered on several occasions. Thus, in 27 of these 30 trading sessions of the D+1 product, the purchase offer placed by ENÉRGYA, in the final seconds of trading, reduced the bid-ask spread sufficiently so that the midpoint between the price of its purchase offer and that of the most competitive sale offer defined the

¹⁸ <https://www.cnmc.es/prensa/multa-axpoiberia-manipular-mercado-intradiario>

final price of the D+1 product for those trading sessions (condition 2 of the methodology for calculating the final daily price, in force at that time, in accordance with market rules)

The introduction of false or misleading signals about the supply, demand or price of a wholesale energy product, as well as the pricing of a wholesale energy product at an artificial level, correspond to manipulative behaviour or attempted market manipulation, which infringes Article 5 of REMIT.

The infringement committed by Enérgya VM Gestión de Energía, S.L.U. was classified as serious, in accordance with the provisions of Article 110 u) of Law 34/1998, of 7 October, on the Hydrocarbons Sector.¹⁹

It is interesting also to hear the defence of the company, as it is in the decision of CNMC: „ Regarding the legality of the transaction, ENÉRGYA alleges: 1) that only the 32 market sessions belonging to the group of unmatched bids were analyzed, instead of the 57 bids made in the last minute of the session during the period investigated, of which 14 were matched, which indicates the lack of legality of the conduct; 2) that MIBGAS in no case warned it that its conduct could constitute market manipulation; and 3) that the fact of placing bids in the last minutes/seconds of the session cannot be classified as unlawful, as the regulations permit it, and the price set was not artificial.”

This argumentation could not stand the investigation of CNMC, so the company received one of the greatest fines in the history of REMIT in Spain. CNMC concluded that Enérgya had artificially set prices in breach of Article 5(2)(a)(ii) of REMIT.

The broader context of the regulatory response has a combined meaning. These cases reveal two distinct but complementary manipulation techniques: 1. quote stuffing distorts order book dynamics in intraday electricity and 2. marking the close manipulates settlement prices in gas markets for next day opening. Both are exploit high-frequency market mechanics, and both were caught and sanctioned via vigilant regulatory AI bot monitoring tools including real-time trade reporting and algorithmic detection.

Impacts beyond fines for the Spanish market were to give priority to algorithmic fairness, and markets tightened systems to prevent queue manipulation and last-second order abuse. The regulators all around Europe strengthened real-time monitoring and enforcement via trade reporters and cross-border data-sharing.

Since trading is done electronically, it is mostly no human traders watching monitors all days, but AI bots, specially developed tools that do the trade. So what are the takeaways of the present case: One, that algorithmic manipulation is real, even micro-second tactics can distort prices and undermine market trust. Two, that

¹⁹ <https://www.cnmc.es/és5511280.pdf>

systemic conduct draws scrutiny, and regulators target behavioral patterns spanning multiple sessions rather than isolated trades. Three, that transparency in methodology gives a clear guidance (e.g., ACER's REMIT editions) aids detection and legal justification. Four, is that the magnitude of the penalties does matter, and multi-million-euro fines ensure penalties outweigh potential gains or cost of reform, with persuasive force.

The spanis case exemplifies modern energy market abuse: subtle, tech-driven, and systematic. CNMC's response—rooted in REMIT and ACER guidance—illustrates how regulators now patrol both the microstructure of markets and the final price formation process. These cases serve as benchmarks for enforcement agencies across the EU aiming to preserve integrity²⁰ in increasingly fast-paced trading environments.

3. The UK case (from the time they were member of the EU)(OFGEMs decision was issued on the 25th of Marc 2020)

In winter 2016, InterGen (UK) Ltd along with its affiliates Coryton, Rocksavage, and Spalding submitted false or misleading physical notifications and stable export limits to the National Grid's Electricity System Operator (ESO) during the critical evening demand period known as the "Darkness Peak".²¹

They indicated the plants would not generate during peak hours, prompting ESO to pay them to remain available ("extended on"). Once secured, InterGen reversed that signal, showing they would generate. They also inflated output limits to increase the ESO's required minimum purchase volumes.

As OFGEM stated later on in its decision „The Authority found that InterGen breached Article 5 of REMIT on 31 October 2016, 7 November 2016, 8 November 2016 and 15 November 2016 ("the Four Days"). InterGen UK; Coryton; Rocksavage; and Spalding are liable for this breach. The Authority also found that Coryton, Rocksavage and Spalding breached SLC 5.1 of their Electricity Generation Licence. Coryton, Rocksavage and Spalding are liable for this breach.”²²

„The Authority found that InterGen engaged in market manipulation to exploit Great Britain's Balancing Mechanism, a Wholesale Energy Market. InterGen submitted false or misleading physical notifications which misrepresented its best estimate of expected generation for particular time periods. Physical notifications inform the system operator (ESO) whether or not a power plant will generate

²⁰ Balázs Hohmann, 'Integrity Advisors and the Development of Administrative Communication Culture' (2019) 4(1) European Journal of Multidisciplinary Studies <https://doi.org/10.26417/ejms-2019.v4i1-527>

²¹ Ratliff, J., 'REMIT in the United Kingdom' in *EU Energy Law Volume X: Energy Market Manipulation and Insider Trading Law in Europe—REMIT* (Edward Elgar Publishing 2025) 695-729. <https://doi.org/10.4337/9789077644225.00031>

²²https://www.ofgem.gov.uk/sites/default/files/docs/2020/04/final_notice_regarding_the_imposition_of_a_financial_penalty_under_regulation_38_1_and_38_5_of_the_electricity_and_gas_market_integrity_and_transparency_enforcement_etc._regulations_2013.pdf

electricity over an interval of time. The submission of misleading physical notifications led to the manipulation of the market from which InterGen derived profits. InterGen also, on several occasions submitted false or misleading signals to the ESO on the power plants' operational characteristics ("Dynamic Parameters") by submitting false or misleading Stable export limits. This was done with a view to achieving even higher revenues for the power plants within the balancing mechanism."²³

„InterGen's staff sent the ESO false or misleading physical notifications that indicated that they would not be generating at the high demand periods ("Darkness Peaks") in order to induce the ESO to pay it to generate. Once InterGen's staff executed this tactic, they would then submit updated information (through revised Physical notifications) to the ESO showing that, contrary to the earlier information, the power stations would actually be generating through the Darkness Peak period.”

„InterGen disseminated false or misleading data on its supply of power for the Darkness Peak in order to be “extended on” (i.e. paid to generate) during the day (in particular during the hours leading up to the Darkness Peak) for large sums of money in the balancing mechanism.” stated by OFGEM, and follows as it is: „ Therefore InterGen contravened Article 5 by: issuing an order to trade in wholesale energy products by submitting bid offer pairs on each of the four days. A bid offer pair is an offer to either generate less or generate more electricity for delivery into the balancing mechanism; submitting, on each of the four days, false / misleading physical notifications, and on occasion, a false / misleading stable export limit, all of which the bid offer pair employed as fictitious device; and that fictitious device gave, or was likely to give, false or misleading signals regarding the supply of wholesale energy products; and in submitting said false / misleading physical notifications and, on several occasions, stable export limits, disseminated information which gave or was likely to give false or misleading signals as to the supply of, demand for, or price of wholesale energy products and that it knew, or ought to have known, that that information was false or misleading.”

„Coryton, Rocksavage and Spalding also breached standard licence condition of their electricity generation licences because the dynamic parameters they submitted did not reflect their true operating characteristics as required, failing to use reasonable endeavours to ensure that the data held by the ESO was accurate at all times.”

„InterGen's behavior on the four days can be summarised as follows: submitting physical notifications, which misrepresented their best estimate of expected generation for particular time periods. Physical notifications inform the ESO whether or not a power plant will generate electricity over an interval of time.

²³ op.cit.

InterGen's traders sent the ESO false or misleading physical notifications that indicated that the power stations would not be generating at all during the high demand period from around 17:00 to 19:00 ("the Darkness Peak"), when in fact they had a contracted position to meet (i.e. it had agreed to supply electricity to other parties during this period and was either required to generate to meet this obligation or to purchase electricity from the market to meet it – it had not done so)."

„InterGen submitted these misleading physical notifications in order to induce the ESO to pay the power stations to generate by purchasing the minimum level of power (i.e. a volume of power equal to the power stations' stable export limit) across the day so that the power stations would be able to generate at the Darkness Peak. This is referred to as an 'extension'. Once the 'extension' had been achieved, InterGen then re-submitted physical notifications showing that the power stations would, in fact, be generating at the Darkness Peak.”

„InterGen also submitted false or misleading signals to the ESO on the power stations' operational characteristics by submitting false or misleading stable export limits (the minimum level at which a power station can, under stable conditions, generate). It did this in order to require the ESO to purchase a higher volume of power in order to “extend” the power stations on to ensure they were available at the Darkness Peak. InterGen submitted an inflated stable export limit with no underlying technical reason and purely for the purposes of commercial gain.”

„Mindful of its principal objective, to protect consumers, its enforcement obligations under REMIT and the need to ensure the integrity of the electricity and gas wholesale markets, the authority considered it appropriate to impose a financial penalty of £35,000,000 (reduced to £24,500,000 for early settlement) on InterGen in respect of its contraventions of Article 5.”

„In addition, the Authority has also agreed with InterGen that it will return £12,791,000 to those parties affected by InterGen's REMIT breach. The Authority has identified this figure as the market detriment. This revenue will be returned to those who suffered losses as a result of InterGen's REMIT breach via the BSUoS charge, administered by Elexon, on behalf of the ESO and market participants.”

„The Authority has decided not to impose a separate financial penalty on Coryton, Rocksavage and Spalding in respect of their breach the Grid Code and SLC 5.1 as it considers that the financial penalty imposed in respect of the breach of REMIT is sufficient.”

„Recognising that InterGen has admitted that it has breached Article 5 of REMIT and has agreed to settle this matter during the early settlement window, the Authority discounted the penalty by 30% in accordance with its REMIT Penalties Statement published on 23 June 2015. This settlement-oriented element of the procedure also illustrates that, alongside punitive enforcement, administrative regulatory proceedings may include consensual or cooperation-based mechanisms

that contribute to procedural efficiency and the restoration of lawful operation.²⁴ Accordingly, the Authority considered that it was appropriate to reduce the total financial liability due from InterGen in respect of the contraventions of Article 5 to £37,291,000.”

Looking back to half a decade into the past of REMIT, this fine was the largest-ever REMIT fine at the time — and sent a horrifyingly deterrent message to market participants.

It reinforced, that explicit misreporting to ESO, if used to distort market signals, constitutes serious market manipulation, let to immediate internal reforms at InterGen—including improved compliance, surveillance, and staff training—for avoidance of future breaches.

4. Case Study: Italy – ENET Gas Over-Nomination (2022)

Historical excerpts from the decision of ARERA²⁵: „ With a note dated December 6, 2022 (acquired with Authority protocol 65515 of December 9,2022), Gestore dei Mercati Energetici S.p.A. (hereinafter GME) sent to the Authority, pursuant to Article 15 of the REMIT and Article 8, paragraph 2, of the Integrated Text for Monitoring the Wholesale Natural Gas Market (Annex A to Authority Resolution 631/2018/R/gas and subsequent amendments; hereinafter TIMMIG), a report of a case of suspected violation of the prohibition on market manipulation pursuant to Article 5 of the REMIT by the company ENET Energy S.A. (hereinafter: ENET or the company).”

„Specifically, this report highlighted intense physical movements (through storage re-registrations) and commercial (mirroring the physical movements, carried out in the markets managed by GME, with purchases and sales at the PSV, virtual trading point) carried out by ENET with reference to a gas day. These had significantly contributed to determining the progressive imbalance of the system, prompting the intervention of the balancing manager, Snam Rete Gas S.p.A. (hereinafter: SRG), to rebalance the system itself, through purchase offers that were mainly matched with the sale offers entered by ENET in the order book, as well as causing an increase in the gas price compared to previous prices.”

„In order to acquire further information on the reported conduct, ENET was heard at the Authority's offices on January 24, 2023, and”.. „the company supplemented the information stated therein. Subsequently, the Authority's offices sent a further request for information to ENET (Authority protocol 7740 of February 3, 2023), which provided the information on February 8, 2023.”

Enet's defense arguments

²⁴ Balázs Hohmann, ‘Az alternatív vitarendezés lehetőségei a közigazgatási hatósági eljárás keretében’ [The Possibilities of Alternative Dispute Resolution within Administrative Authority Proceedings] (2019) 19(1) *Európai Jog: Az Európai Jogakadémia Folyóirata* 23.

²⁵ <https://www.arera.it/fileadmin/allegati/docs/24/47-2024-S-gas.pdf>

„During the hearing and in response to the communication of the preliminary findings, Enet argued that it had implemented the contested conduct to correct the erroneous purchase of a large amount of interruptible injection storage capacity for the so-called winter counterflow service offered by Stogit at the end of October 2022. More specifically, that it had erred, due to a lack of information attributable to SRG, in believing that the injection storage capacity usable with the winter counterflow service was also interruptible (and not just non-interruptible), i.e., the capacity actually used by Enet for injection.

Enet insisted that the conduct was carried out on a single day and precisely the day after SRG's clarification on the winter counterflow service, requested by Enet itself. In accordance with the best practices of operators in the sector, the company - in order to neutralize the risks arising from fluctuations in the market price in the period between the purchase of gas and its resale - regularly concludes specific hedging transactions on the market.

However, these hedge risk only in the periods identified at the time of the conclusion of the transactions themselves (which in this case was the first quarter of 2023) and, therefore, would not have been concretely useful in the specific case, which is also characterized by strong price volatility.

Therefore, in Enet's opinion, if SRG had clarified as early as October 2022 that the short-term capacity usable with the winter counterflow service was only the non-interruptible capacity, the contested conduct "would certainly not have occurred."

„In its reply to the communication of the preliminary findings, the company then disputed the statement of the Head of the proceedings according to which the recorded increase in the gas price, is attributable to the contested conduct. In support of this argument, the company highlighted how: (i) in Enet's opinion, therefore, SRG's latest intervention cannot be attributed in any way to the contested conduct, as (ii) said intervention was not relevant for the purposes of balancing the system; (iii) and all the transactions carried out by Enet, i.e., were at a price substantially aligned with the market price. If Enet had intended to profit from manipulative behavior, it could have placed offers at a higher price; (iv) the correlation between the MI prices and those of the following day's MGP in the evening hours was highest.

The operator claimed, as a justification for its conduct, that it was induced to engage in the conduct in question by a lack of information—attributable, essentially, to SRG—regarding the technical characteristics of the winter counterflow service offered by Stogit.”

„As shown by the documentation acquired in the proceedings the winter counterflow service offered in October 2022 provided for the implicit assignment of delivery capacity in the period between January 1 and March 31, 2023, associated with the assignment of non-interruptible injection capacity in the period between

November 1 and December 31, 2022. Therefore, the user who had used injection capacity at the storage sites for the period November-December 2022 could have used the same delivery capacity in the period January-March 2023.

The error that Enet allegedly made was to have believed that the injection capacity can be used within the winter counterflow service (and such therefore, it is necessary to determine the implicit assignment of the same capacity for delivery in the following period, between January and March 2023), even if the capacity is interruptible (i.e. revocable) and not just non-interruptible (pursuant to Article 1 of the RAST, non-interruptible capacity is defined as "storage capacity guaranteed as non-interruptible, except in cases of force majeure or emergency" and interruptible capacity "storage capacity subject to interruptibility, with the obligation to provide advance notice by the storage company").

But this argumentation did not convince the Italian regulator, as it follows its decision by this: „The operator's argument is completely misleading. The error invoked by the company does not, in fact, refer to an element specific to the unlawful act, but to a fact completely unrelated to (and preceding) the contested conduct. In this regard, as already observed by the Head of the proceedings in the communication of the preliminary investigation findings, the alleged need to avoid potential economic losses associated with its own error of assessment - reiterated in the reply to the preliminary investigation findings - can in no way justify conduct that is contrary to the provisions in force and, in this case, to the provisions of REMIT.

Therefore, the circumstances that Enet engaged in manipulative conduct on the day it realized it had committed the above-described error and that SRG—in light of the experience gained the previous year—decided in 2023 to clarify an (actually) intrinsic characteristic of the winter counterflow service in order to achieve greater transparency among operators are completely irrelevant. Nor is the circumstance that the normal "insurance" tools the company claims to use would not have been effective in the case at hand. These are, in fact, circumstances that all pertain to the motivations underlying the contested conduct and, as such, are irrelevant to the determination of the offense in question, for which manipulative intent is not necessary.

In any case, regarding the characteristics of the contested conduct, the documents show that it involved gas overnominations in supply that were much higher than the volumes Enet injected.”

At the final hearing the company attributed the amount of the overnomination to the risk of being "cut" by SRG.

Furthermore, at a certain time on the gas day in question, the company had reached equilibrium, thus resolving the alleged problem arising from the impossibility of using the winter counterflow service. But, the company continued to overnominate (in the opposite direction, i.e., by injection) for quantities well

above its actual needs in terms of handling, resulting in a significant worsening of the system imbalance, which then led to the intervention of SRG.

The arguments with which Enet criticized the authorities findings insofar as they referred to the increase in the recorded gas price, were also unfounded. In the context of this proceeding, in fact, no "anomalous price variations" were called against Enet. In any case, pursuant to Article 2, number 2, letter a), iii), market manipulation is defined as "the conclusion of any transaction or the transmission of any order to buy or sell in wholesale energy products that uses, or attempts to use, a fictitious instrument or any other form of deception or artifice that sends, or is likely to send, false or biased signals regarding the supply, demand, or price of wholesale energy products." Therefore, the conduct in question would still be illegal, having, as already explained, sent a false signal to the market regarding the state of the system, even if SRG had not intervened or if its intervention had not resulted in an increase in the imbalance price.

Therefore, with specific reference to the observation regarding the modest size of the price variations on that day, the comparison with the price variations that occurred on the previous or following day is irrelevant for the purposes of establishing the alleged offense. For the same reason, the company's observations regarding the correlation between the prices recorded are irrelevant.

In light of all the violation was established, since the company appears to have sent misleading signals to the market, specifically, at the beginning of the day a balanced system signal (when in fact it was short, excluded ENET's improperly long position) and at the end of the day a very short system signal (when in fact it was not so short, again excluding ENET's improperly short position).

So, ENET's conduct under this provision was illicit because it violated the provisions of Article 5 of the REMIT, which prohibits market manipulation in wholesale energy markets."

So, onn 23 February 2024, ARERA (Italian NRA) imposed a €940,000 penalty on ENET Energy S.A.

As for those kind readers, who are not so much familiar with the functioning of a liquid gas market the punch line: ENET made excessively large storage nominations, requesting volumes for both injection and withdrawal that far exceeded its actual needs. These physical nominations were accompanied by corresponding exchange trades on the GME-managed PSV virtual gashub (commodity exchange in Italy)

The combined effect produced a significant imbalance in the system, prompting the TSOs (notably Snam Rete Gas) to engage in balancing actions, purchasing or selling volumes at potentially unfavorable prices. That is why ARERA determined that the inflated and sudden nominations were not aligned with ENET's real balancing needs and deliberately triggered REMIT system intervention.

This case underscored that even behind-the-scenes actions like over-nomination can constitute meaningful market manipulation. The ENET over-

nomination case serves as a leading example of non-typical manipulation detected and penalized under REMIT. By flagging a single-day misuse of storage mechanisms, ARERA delivered a strong message: manipulation isn't limited to speculative trading—it can arise from structural imbalances in operations. And regulators across Europe are prepared to enforce compliance, even via nuanced legal pathways like the “fictitious device” route.

5. Hungary – Gas Transport Capacity Manipulation (2022) - Prvo Plinarsko Društvo d.o.o. (PPD) vs. MEKH

The Hungarian Energy and Public Utility Regulatory Authority (HEA) issued a decision on 2 June 2023, wherein it found that Prvo Plinarsko Društvo d.o.o. (PPD) has engaged in market manipulation on the natural gas market during one of the rolling monthly capacity auctions, breaching Article 5 of the EU REMIT.²⁶ Article 5 says, on market manipulation that „Any engagement in, or attempt to engage in, market manipulation on wholesale energy markets shall be prohibited.”

It was widely spread in energy trader circles, that HEA has fined PPD HUF 500,000,000 (approximately EUR 1.4 million). HUNGARIAN ENERGY AUTHORITY's own investigation revealed that PPD, in an “ascending clock auction”, manipulated the natural gas market during the rolling monthly capacity auction, held from 17 to 26 January 2022 on the capacity product for the Austria to Hungary interconnection point for February 2022. The manipulation happened so, that PPD had registered a bid for nearly the totality of the capacity, which nobody could challenge, and in the last moment, when no other competitor was in a position to make a new valid bid, withdrew its bid.

According to HEA's decision, PPD's bidding behaviour was manipulative by maintaining its bids for almost the whole amount of the offered capacity for thirty-six bidding rounds of the auction and then in the last moment leaving the auction without actual capacity booking. By doing this, PPD raised the clearing price for the other market participants in the auction up to four and a half times of the reserve price. PPD's bidding behaviour gave false signals to the market as to the real demand of the wholesale naturalgas product in question and stucked the price of the given wholesale energy product at an abnormally high level.

On 5 July 2023, PPD submitted an administrative court action against the decision of the Hungarian Energy Authority. The case at the closure of the present writing is still pending.

This case is a clear demonstration, that market manipulation isn't limited to traditional trades—it also applies to capacity auction behavior. The substantial fine underscores that capacity auction strategies must reflect genuine interest—not

²⁶ REMIT breach: Hungarian regulator fines Prvo Plinarsko Društvo d.o.o. for market manipulation | www.acer.europa.eu

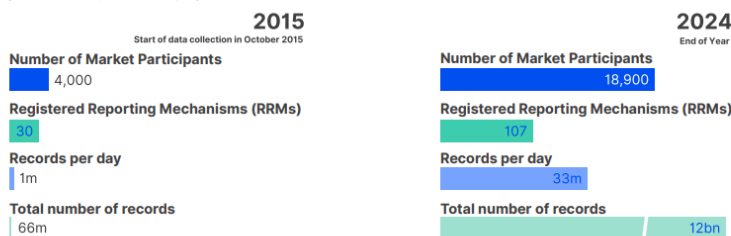
gaming tactics. It was the biggest fine ever issued in the history of HEA since its foundation in 1993.²⁷

ACER receives and screens data from over 40 EU and EEA countries (MOU-s are concluded) and uses ARIS (ACER REMIT Information System) to aggregate order/trade data (from exchanges, brokers, TSOs, etc.), detect suspicious behaviors (e.g., cross-border arbitrage distortions), issue suspicious transaction reports (Stories) to relevant NRAs.

The table below demonstrates key numbers of REMIT data collection, in a decade. Soon the server computers of ACER have to be changed not to super computers, but to quantum computers, if the trend goes like this.

Figure 3: Development of key figures on REMIT data collection.

Figure 2: Development of key figures on REMIT data collection



Source: ACER (2025).

Source:

https://www.acer.europa.eu/sites/default/files/REMIT/REMIT%20Reports%20and%20Recommendations/REMIT%20Quarterly/REMITQuarterly_Q1_2025_2.0.pdf

ACER algorithms flag patterns such as simultaneous buy/sell trades in neighboring markets, price/spread anomalies near interconnector deadlines, unusual transport nominations or capacity hoarding. After ACER flags a suspicious case, it alerts the NRA concerned, which starts its own investigation, or a joint investigation with other NRA-s and ACER. If the suspicion is based, they separately issue take investigations, and after the due national procedures the case ends in a fine or even criminal code consequences for the delinquents.

In the Hungarian capacity manipulation case (PPD 2022), the Croatian company was fined by the Hungarian regulator (MEKH) with ACER support. Though joint audits and inspections are legal too, as allowed under EU law, but never before were executed.

²⁷ <https://www.acer.europa.eu/news/remit-breach-hungarian-regulator-fines-prvo-plinarsko-drustvo-doo-market-manipulation>

REMIT's cross-border enforcement relies on ACER's centralized surveillance and NRA-led prosecution, with extensive data sharing, STR coordination, and procedural alignment. As markets grow more interconnected, these mechanisms are increasingly critical in identifying and punishing cross-market abuses that distort EU-wide energy pricing.

As for the future, we see, REMIT is in sky rocketing development, but what are its directions? The first is the extension of its scope to new markets (trade in LNG, hydrogen, biogas, electricity and gas storage) and new reporting obligations under REMIT II (public consultations opened this September). It envisions stronger ACER oversight, including new Investigations Department launching in 2025²⁸, with first cross-border cases expected in 2026. In the future, ACERs power will be greater, lets just see the possible on site investigations in cooperation with NRAs. It will make ACER the energy FBI of Europe. Market monitoring activity will be even more AI robotized with self learning capabilities and automated actions. Reporting regime improved but reporting obligations minimized. Information and data flow unified, and validated and block chain logged at every moment. So market manipulation and insider trading will not pay.

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²⁸ <https://www.acer.europa.eu/remit/remit-investigations>