

ELIA TRANSMISSION BELGIUM

RULES FOR COORDINATION AND CONGESTION MANAGEMENT

06/06/2023



Table of content

TITLE 1	Intr	oduction	6
TITLE 2	Gen	eral Provisions	6
Article	1.	Subject matter and scope	6
Article	2.	Publication and implementation of the Rules	6
Article	3.	Definitions and interpretations	7
TITLE 3	Coo	rdination of Technical Units	. 13
Article	4.	Purpose of coordination of Technical Units	. 13
Article	5.	Means for coordination	. 14
Article	6.	Rules for requesting changes of an Availability Status	. 14
Article	7.	Rules for requesting a Must Run or a May-Not-Run	. 15
TITLE 4	Con	gestion Management	. 16
Article	8.	Purpose of Congestion Management	.16
Article	9.	Remedial Actions used for Congestion Management	. 16
Article	10.	Rules to choose between Curative, Preventive, or Restoring Remedial Actions	. 18
Article		Principles for the activation of Remedial Actions after closure of the Day-ahead	
Marke	-	18	
Article		Countertrading & cross-border Redispatching	
Article		Activation of the compensation mechanism for the neutralization of the impact of	
		on of RD Energy Bids on the system imbalance	
Article		Priority Dispatch	
Article		Cost-based Redispatching	
Article	16.	Congestion Risk Indicator	. 22
TITLE 5	Rep	orting	. 24
Article	17.	Monitoring	. 24
Article	18.	Publication of information	. 26
TITLE 6	Fina	ll Provisions	. 26
Article	10	language	26



THE BELGIAN TRANSMISSION SYSTEM OPERATOR, TAKING INTO ACCOUNT THE FOLLOWING:

Whereas:

- 1. article 20 of the Regulation (EU) 2017/1485 establishing a guideline on electricity transmission system operation (hereafter referred to as "SOGL") requires that each TSO "shall endeavour to ensure that its transmission system remains in the normal state and shall be responsible for managing operational security violations. To achieve that objective, each TSO shall design, prepare and activate Remedial Actions taking into account their availability, the time and resources needed for their activation and any conditions external to the transmission system which are relevant for each Remedial Action."
- 2. article 22 of the SOGL lists the categories of Remedial Actions.
- 3. article 21(1) of the SOGL lays down the principles applicable to Remedial Actions designed, prepared and activated by a TSO, whether or not in a coordinated way with other concerned TSOs. The events requiring coordination with other concerned TSOs will comply with the methodology on Coordinating Operational Security Analysis (hereafter referred to as "CSA") set up in accordance with article 75 of the SOGL, as well as with articles 76(1)(b) and 78(4) of the SOGL specifying the requirements for a regional Operational Security coordination at Capacity Calculation Region level.
- 4. the methodology for CSA (in accordance with article 75(1) of the SOGL) has been approved by the Agency for the Cooperation of Energy Regulators in the decision 07/2019 of 19 June 2019.
- 5. article 35(4) of the Regulation (EU) 2015/1222 establishing a guideline on capacity allocation and Congestion management (hereafter referred to as "CACM") requires each TSO to "abstain from unilateral or uncoordinated redispatching and countertrading measures of cross-border relevance."
- 6. article 21(2) of the SOGL specifies the criteria a TSO shall apply when selecting appropriate Remedial Actions.
- 7. article 25(1) of the CACM requires that "each TSO within each capacity calculation region shall individually define the available Remedial Actions to be taken into account in capacity calculation to meet the objectives of this Regulation."
- 8. in compliance with article 35(1) of the CACM coordinated Redispatching and Countertrading shall be subject to a common methodology developed and proposed by all the TSOs in each Capacity Calculation Region. In compliance with article 74(1) of the CACM coordinated Redispatching and Countertrading cost sharing shall be subject to a common methodology developed and proposed by all the TSOs in each Capacity Calculation Region.
- 9. articles 12 and 13 of the regulation (EU) 2019/943 of the European Parliament and of the Council of 5 June 2019 on the internal market for electricity (hereafter referred



- to as "Electricity Regulation") describe the rules on the priority of dispatch for electricity produced from renewable energy sources or high-efficiency cogeneration.
- 10. The Code of Conduct, approved by CREG by decision (B) 2409 of October 20, 2022, and as amended from time to time, establishing conditions for connection and access to the transmission grid and methods for calculating or setting conditions for the provision of ancillary services and access to cross-border infrastructure, including the procedures for capacity allocation and congestion management;
- 11. proposals for grid investments triggered by risks of structural Congestion are approved by the relevant authority and published in accordance with the legislations regarding the European development plan (Ten-Year Network Development Plan), the Federal Development Plan, and the development plans for the Flemish, Walloon and Brussels regions in Belgium. These development plans determine the Elia Grid that is considered in grid models, security analyses and Contingency Analyses that Elia performs for day D.
- 12. articles 82-103 of the SOGL lay down the rules for the Outage Planning Coordination at the level of the Outage Coordination Region.
- 13. the methodology for assessing the relevance of assets for outage coordination in accordance with article 84 of the SOGL describes the principles to define Cross-border Relevant Assets.
- 14. Elia receives Daily Schedules of Technical Units in respect of the Terms and Conditions for the Scheduling Agent.
- 15. article 13 of the Commission Regulation (EU) No 543/2013 of 14 June 2013 on submission and publication of data in electricity markets (hereafter referred to as "Transparency Regulation") requires each TSO to provide information relating to Congestion management measures to ENTSO-e.
- 16. article 15 of the Transparency Regulation requires each TSO to provide information relating to the unavailability of generation and production units to ENTSO-e.
- 17. article 10(1) of the Regulation (EU) 2016/1719 of 26 September 2016 establishing a guideline on forward capacity allocation (hereafter referred to as "FCA") requires the submission of a common proposal of the TSO's in a Capacity Calculation Region for regulatory approval of a common capacity calculation methodology for long-term time frames.
- 18. article 20(2) of the CACM requires the submission of a common proposal of the TSO's in a Capacity Calculation Region for regulatory approval of a common capacity calculation methodology for the Day-ahead Market and Intraday Market timeframes.
- 19. article 24.3(c) of the Common Grid Model methodology in accordance with article 17 of the CACM requires TSO's to jointly specify the Common Grid Model alignment methodology.



- 20. article 13 of the Electricity Regulation describes the rules on financial compensation of Redispatching, specifying in article 13.3 the conditions that allow a non-market-based Redispatching, namely situations where:
 - a. "no market-based alternative is available;
 - b. all available market-based resources have been used:
 - c. the number of available power generating, energy storage or demand response facilities is too low to ensure effective competition in the area where suitable facilities for the provision of the service are located; or
 - d. the current grid situation leads to Congestion in such a regular and predictable way that market-based redispatching would lead to regular strategic bidding which would increase the level of internal Congestion and the Member State concerned either has adopted an action plan to address this Congestion or ensures that minimum available capacity for cross-zonal trade is in accordance with Article 16(8)."
- 21. article 16 (paragraphs 4 and 8 in specific) of the Electricity Regulation describe the principles regarding the allocation of interconnection capacity to market participants and the use of Countertrading and Redispatching as a Remedial Action to maximize availability of the minimum provided capacity.
- 22. article 70(1) of the SOGL requires the submission of a common proposal of the TSO's for regulatory approval of a methodology for building the day-ahead and intraday Common Grid Models (CGM) from Individual Grid Models (IGM), taking into account the Common Grid Model methodology in accordance with article 17 of the CACM.
- 23. Elia submits the Rules for regulatory approval in accordance to articles 8 (§1,5°) and 23 (§2, alinea 2, 36°) of the law of 29 April 1999 concerning the organization of the electricity market (hereafter referred to as "Electricity Law"), article 59(10) of the Directive (EU) 2019/944 of the European Parliament and of the Council of 5 June 2019 on common rules for the internal market for electricity and amending Directive 2012/27/EU (hereafter referred to as "Electricity Directive"), and article 122 of the Code of Conduct
- 24. should differences and/or contradictions exist between the Rules and any of the European and/or regional regulatory methodologies coming from SOGL, CACM or FCA, the later shall prevail.
- 25. Elia published the draft proposal of the Rules for public consultations from 06/06/2023 until 18/08/2023.

SUBMITS THE FOLLOWING FOR APPROVAL TO THE COMPETENT REGULATORY AUTHORITY (in casu CREG):



TITLE 1 Introduction

This set of rules for coordination and Congestion Management (hereafter referred to as "Rules") is a proposal developed by Elia Transmission Belgium (hereafter referred to as "Elia") pursuant to articles 8 (§1,5°) and 23 (§2, alinea 2, 36°) of the Electricity Law, article 59 (10) of the Electricity Directive, and article 122 of the Code of Conduct.

TITLE 2 General Provisions

Article 1. Subject matter and scope

- 1. The Rules concern the coordination of Technical Units subject to the Terms and Conditions for the Outage Planning Agent and the Terms and Conditions for the Scheduling Agent, and Congestion Management by Elia for the secure and reliable operation of the Elia Grid.
- 2. In accordance with articles 8 (§1,5°) and 23 (§2, alinea 2, 36°) of the Electricity Law and article 59 (10) of the Electricity Directive the underlying Rules contain the following:
 - i. rules for the coordination of Technical Units, as described in TITLE 3;
 - ii. rules for the national management of Congestion as described in TITLE 4;
 - iii. rules for the international management of Congestion and coordination of interconnections as described in TITLE 4 (more specifically Article 12) as far as not described in European methodologies implemented in accordance with SOGL or CACM (see Whereas 3 and 8) or if related to aspects to be defined on a national level in support of those European methodologies;
 - iv. the rules for the management of Congestion described in TITLE 4 must take into account the priority of production given to installations using renewable energy sources and installations with combined heat power production, as far as not endangering the secure operation of the transmission grid, as described in TITLE 4 (more specifically Article 14);
 - v. the overview of publications and reporting by Elia allowing the competent regulatory authority to monitor Congestion Management as described in TITLE 5.
- 3. Although articles 8 (§1,5°) and 23 (§2, alinea 2, 36°) of the Electricity Law and article 59 (10) of the Electricity Directive require the underlying Rules to contain the following information, the following topic is considered out of scope of the Rules:
 - capacity allocation as part of Congestion Management is not described in the Rules as fully covered by the CACM and European methodologies in implementation thereof.

Article 2. Publication and implementation of the Rules

 After notification of approval by the competent regulatory authority to whom Elia had submitted the Rules, Elia will inform market parties affected by (amendments to) the Rules of their entry into force.



- 2. After notification of approval by the competent regulatory authority to whom Elia had submitted the Rules, Elia shall publish the Rules.
 - Unless specified otherwise in the relevant article, the Rules will enter into force after notification by Elia of the impacted market parties as described in paragraph 1, but not earlier than one month after the approval of the Rules.
- 3. The Rules will enter into force for an undetermined duration.
- 4. Amendments to the Rules at the request of a competent regulatory authority (in casu CREG) (in accordance with article 23 (§2, alinea 2, 36°) of the Electricity Law and article 59 (10) of the Electricity Directive) or at the proposal of Elia shall be consulted upon publically before submission for approval to the competent regulatory authority (in casu CREG).

Article 3. Definitions and interpretations

- 1. All references to other legislations are explicitly defined. All Articles without explicit reference to other legislation concern Articles in these Rules.
- 2. In the Rules, unless the context requires otherwise:
 - the singular indicates the plural and vice versa;
 - references to one gender include all other genders;
 - the table of contents, titles and headings are for convenience only and do not affect their interpretation;
 - the word "including" and its variations are to be construed without limitation;
 - any reference to legislation, regulations, directive, order, instrument, code or any other enactment shall include any modification, extension or re-enactment of it then in force.
- 3. For the purposes of these Rules, the terms used have the meaning of the definitions included in article 3 of the SOGL, in article 2 of the CACM, in article 2 of Code of Conduct, and article 2 of the methodology for CSA, unless if specified differently in paragraph 4.
- 4. For the purposes of these Rules, the following definitions shall also apply:

(1)	Ancillary Services	means ancillary services as defined in point (53) of article 2 of the Code of Conduct.
(2)	Availability Status	means availability status as defined in the Terms and Conditions for the Outage Planning Agent
(3)	Balancing Rules	A document, approved by the CREG, describing the market operation rules for the compensation of quarter-hourly imbalances,



		pursuant to article 212 §1 of the Code of Conduct;
(4)	Balancing Energy Bid	means mFRR Energy Bid or aFRR Energy Bid as defined in respectively the Terms and Conditions for the Balancing Service Provider mFRR and the Terms and Conditions for the Balancing Service Provider aFRR
(5)	Capacity Calculation Region or "CCR"	means capacity calculation region as defined in point (3) of article 2 of the CACM.
(6)	Common Grid Model or "CGM"	means common grid model as defined in point (2) of article 2 of the CACM.
(7)	Conditional Outage	Conditional outage on a network element means that a security analysis (N-1) in case the element is not in service, results in overloads at some specific times/conditions after application of mitigating actions such as Remedial Actions. In other words, this means that this element can only be cut under specific conditions. There are 2 types of conditions: 1. Conditions with an unpredictable character, e.g. wind, solar, international flux There can be more favourable periods to plan the outage, however, there will always be a validation to be done in Day Ahead. For this type of outage there is a consequence towards the organization of the maintenance and infrastructure work, since back-up works have to be prepared. 2. Conditions with a predictable character, e.g. outage of a generation unit, load level This outage can be planned as soon as the condition is known.
(8)	Congestion	means Congestion as defined in point (4) of article 2 of the Electricity Regulation.
(9)	Congestion Management	The preparation and implementation of actions by Elia to prevent the occurrence of detected Congestions or to solve unexpected occurring physical Congestions in real-time.



		In scope of this document the definition of Congestion Management is limited to the local actions performed by Elia, excluding the detailed processes of how TSO's coordinate (in relation to capacity calculation and allocation, cross-border Redispatching, Countertrading), which is regulated via European methodologies except aspects to be defined
		on a national level in support of those European methodologies.
(10)	Congestion Relevant Grid Element	means relevant grid elements as defined in point (85) of article 3 of the SOGL as well as other grid elements of the 380kV, 150kV and 220kV Elia Grid, which regularly require the application of Non-Costly or Costly Remedial Actions (Redispatching) for Congestion Management
(11)	Congestion Risk Indicator or "CRI"	represents the status of an Electrical Zone regarding the risk of Congestion associated to the increase or decrease of the active power net injection in the Electrical Zone
(12)	Contingency	means contingency as defined in point (10) of article 2 of the CACM.
(13)	Contingency Analysis	means contingency analysis as defined in point (27) of article 3 of the SOGL.
(14)	Control Area	means control area as defined in point (67) of article 2 of the Electricity Regulation;
(15)	Costly Remedial Action	A Remedial Action involving a financial compensation of an external party.
(16)	Countertrading	means countertrading as defined in point Article 2 (27) of the Electricity Regulation.
(17)	CREG	The federal regulatory authority of gas and electricity markets in Belgium.
(18)	Cross-border Relevant Asset	means relevant asset ¹ as defined in point (84) of article 3 of the SOGL;

¹ To clarify: this includes demand facilities and power-generating modules (which can be Technical Units in the framework of the Rules) as well as grid elements.



(19)	Curative Remedial Action	means curative Remedial Action as defined in point (24) of article 2 of the CSA methodology.
(20)	Daily Schedule	means daily schedule as defined in the Terms and Conditions for the Scheduling Agent.
(21)	Day-ahead Market	means day-ahead market time-frame as defined in point (34) of article 2 of the CACM.
(22)	Electrical Zone	The Elia Grid is divided in a number of electrical zones. ²
(23)	Elia Grid	The electricity grid owned by Elia, or at least has the right to use or operate, and for which Elia has been appointed as system operator.
(24)	Individual Grid Model or "IGM"	means individual grid model as defined in point (1) of article 2 of the CACM.
(25)	Intraday Market	means intraday market time-frame as defined in point (37) of article 2 of the CACM.
(26)	May-Not-Run	means May-Not-Run as defined in the Terms and Conditions for the Scheduling Agent
(27)	Must-Run	means Must-Run as defined in the Terms and Conditions for the Scheduling Agent
(28)	Monitored Grid Element	Grid element subject to relevant Congestion risk and which is therefore considered to determine the CRI level of Electrical Zones
(29)	Non-Costly Remedial Action	A Remedial Action not involving a financial compensation to an external party.
(30)	Operational Security	means operational security as defined in point (1) of article 3 of the SOGL.
(31)	Operational Security Analysis	means operational security analysis as defined in point (50) of article 3 of the SOGL.
(32)	Outage Coordination Region	means outage coordination region as defined in point (82) of article 3 of the SOGL.
(33)	Outage Planning Agent or "OPA"	Any natural person or legal entity as defined in article 3 (87) of the SO GL, and with whom Elia has concluded a contract for the Outage Planning Agent in accordance with article 126 of the Code of Conduct.

² At the moment of submitting the Rules the number of zones is ten: 380, Hainaut East, Hainaut West, Langerbrugge East, Langerbrugge West, Ruien, Merksem, Stalen, Liège and Schaerbeek.



(34)	Outage Planning Coordination or "OPC"	outage coordination performed by Elia in accordance with articles 82-103 of the SOGL.
(35)	Preventive Remedial Action	means preventive Remedial Action as defined in point (18) of article 2 of the CSA methodology.
(36)	Priority Dispatch	means priority dispatch as defined in point (20) of article 2 of the Electricity Regulation.
(37)	Redispatching	means redispatching as defined in point (26) of the Electricity Regulation.
(38)	Redispatching Energy Bid or RD Energy Bid	means RD Energy Bid as defined in the Terms and Conditions for the Scheduling Agent
(39)	Redispatching Gate Closure Time or "RD GCT"	means RD GCT as defined in the Terms and Conditions for the Scheduling Agent
(40)	Regional Coordination Centre or "RCC"	means regional coordination centre ('RCC') as defined in point (63) of the Electricity Regulation.
(41)	Remedial Action	means Remedial Action as defined in point (13) of article 2 of the CACM.
(42)	Residual Load	The residual load (or net load) is defined here as the electricity demand minus decentral generation from variable renewable energy sources (wind, solar and run of river hydroelectric plants following weather profiles) and, other 'must run' decentral generation (combined heat and power and waste incineration following operational constraints such as heat profiles).
(43)	Restoration Services	As defined in Article 2 (52°) of the Code of Conduct
(44)	Restoring Remedial Action	means restoring Remedial Action as defined in point (13) of article 2 of the CSA methodology.
(45)	Scheduling Agent or "SA"	Any natural person or legal entity as defined in article 3 (90) of the SOGL, and with whom Elia has concluded a contract for the Scheduling Agent in accordance with article 131 of the Code of Conduct.
(46)	Technical Unit	means technical unit subject to the Terms and Conditions for the Outage Planning Agent and



		the Terms and Conditions for the Scheduling Agent, and defined therein. ³
(47)	Terms and Conditions for the Balancing Service Provider	Means the terms and conditions for balancing service providers in accordance with article 18 of the EBGL.
(48)	Terms and Conditions for the Outage Planning Agent or "T&C OPA"	Terms and Conditions including the contract between Elia and the Outage Planning Agent in accordance with article 126 of the Code of Conduct, which governs the exchange of information between the Outage Planning Agent and Elia with respect to Availability Plans of Technical Units and possible amendments thereof.
(49)	Terms and Conditions for the Scheduling Agent or "T&C SA"	Terms and Conditions including the contract between Elia and the Scheduling Agent in accordance with article 131 of the Code of Conduct, which governs the exchange of information between the Scheduling Agent and Elia with respect to active power schedules (Daily Schedules) and possible amendments thereof.
(50)	Total Load	Total electrical consumption takes account of all the loads on the Elia Grid, as well as on the distribution system (including losses). Given the lack of quarter- hourly measurements for load within distribution systems, this load is estimated by combining calculations, measurements and extrapolations.
(51)	Transfer of Balancing Capacity	means transfer of balancing capacity as defined in point (26) of article 2 of EBGL.
(52)	Transitory Admissible Overloads	means transitory admissible overloads as defined in point (65) of article 3 of the SOGL.
(53)	Zonal Active Power Cap	Maximum increase or decrease of active power net injection allowed in an Electrical

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³ Technical Units in these Rules are those Technical Units that are coordinated and used for the purpose of Congestion Management by Elia, and subject to the Terms and Conditions for the Outage Planning Agent or to the Terms and Conditions for the Scheduling Agent, unless expressly stated otherwise in the Rules.



	Zone with a medium CRI level without
	creating a Congestion

TITLE 3 Coordination of Technical Units

Article 4. Purpose of coordination of Technical Units

- Parallel to the Outage Planning Coordination for Cross-border Relevant Assets on a European level as referred to in Whereas 12 and 13, Elia monitors the compatibility of Availability Statuses delivered by Outage Planning Agents for all Technical Units subject to and in respect of the conditions set in the Terms and Conditions for the Outage Planning Agent.
- 2. Within the compatibility check referred to in paragraph 1 Elia pays special attention to (no order of priority):
 - i. Matching the maintenance of grid elements with Availability Statuses of Technical Units with as main objective to avoid risks for Operational Security while at the same time try to avoid market distortions.
 - ii. Monitoring the availability of Technical Units for Ancillary Services to the extent that monitoring of availability is needed in case of a limited or insufficient supply of the Ancillary Service. In particular Elia monitors:
 - the availability of Technical Units prequalified for the delivery of balancing services. Note that this check occurs independent of the procurement of balancing capacity and is therefore not a replacement of actual availability controls as described within the contract of the concerned Ancillary Service.
 - the availability of Technical Units contracted for the delivery of Restoration Services.
 - the availability of Technical Units with flexibility available for Redispatching within each Electrical Zone.
 - the availability of Technical Units to ensure operational readiness to provide voltage control capabilities within each Electrical Zone.
 - iii. Monitoring the scarcity risk based on the planned availability of electricity generating Technical Units throughout the year according to the ENTSOe Methodology for Short-term and Seasonal Adequacy Assessments⁴
 - iv. Specifically for Restoration Services, Elia also verifies per Restoration Service Provider whether the contractual rules regarding simultaneous unavailability of Restoration Services as defined in the Terms and Conditions for Restoration Service Provider are not breached.

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⁴ Available here: Microsoft Word - ACER Decision No 08-2020 on the RPR8 Annex I (europa.eu)



- In addition for Technical Units that are planned to be available based on the Availability Statuses delivered by the Outage Planning Agent, Elia coordinates the scheduled active power on the Technical Unit in order to
 - i. facilitate the planned or forced outage of grid elements in order to minimize risks of Operational Security.
 - ii. ensure operational readiness to provide voltage control capabilities within each Electrical Zone.

Article 5. Means for coordination

When Elia, based on the checks described in Article 4, identifies potential risks for Operational Security, Elia can use the following procedures:

- Elia can request a change of the Availability Status of Technical Units subject to the Terms and Conditions for the Outage Planning Agent and in accordance with Article
 6.
- ii. Elia can request a Must-Run or a May-Not-Run on Technical Units subject to the Terms and Conditions for the Scheduling Agent and in accordance with Article 7.

Article 6. Rules for requesting changes of an Availability Status

- 1. Elia may request changes for Technical Units that are Cross-border Relevant Assets in accordance with the Outage Planning Coordination referred to in Whereas 12 and in accordance with the Terms and Conditions for the Outage Planning Agent.
- 2. Elia may request changes for Technical Units that are not Cross-border Relevant Assets in accordance with the Terms and Conditions for the Outage Planning Agent.
- 3. When Elia requests to change a period of planned unavailability, Elia shall share with the Outage Planning Agent(s) the periods in which to avoid the unavailability of the concerned Technical Unit.
- 4. If efficient multiple changes of Availability Statuses are possible to reduce one of the risks monitored as described in Article 4, Elia will agree with the concerned Outage Planning Agent(s) on the change that:
 - most effectively reduces the risk underlying the change request⁵,
 - without creating (other) risks of Operational Security (as described in Article 4),
 - and can be executed at the lowest cost.
- 5. When receiving a change request of an Availability Status from an Outage Planning Agent in line with the conditions set in the contract for the Outage Planning Agent, Elia verifies the acceptability of the request monitoring the risks described in Article 4. Elia responds

⁵ Meaning the goal is to achieve highest impact with lowest cost.



to the Outage Planning Agent in line with the modalities specified in the Terms and Conditions for the Outage Planning Agent.

- 6. In case an Outage Planning Agent requests a change on a Cross-border Relevant Asset, Elia will coordinate with the other TSO's in the Outage Coordination Region in accordance with article 100 §1-3 of the SOGL. In case an Outage Planning Agent requests a change on a Technical Unit that is not a Cross-border Relevant Asset Elia will respond to the Outage Planning Agent without coordination within the Outage Coordination Region.
- 7. Both parties may set conditions that must be met in order to agree to a change requested by the other party conform to modalities specified in the Terms and Conditions for Outage Planning Agent
- 8. When Elia detects a non-compliance to contractual rules as referred to in Article 4 paragraph 2(iv), Elia will demand at no cost the change of the Availability Status.

Article 7. Rules for requesting a Must Run or a May-Not-Run

- 1. Before the deadline defined in the Terms and Conditions for the Scheduling Agent Elia may request to the Scheduling Agent of a particular Technical Unit, as introduced in Article 5 ii), a Must-Run on the Technical Unit in order to:
 - ensure that a net offtake or injection of the concerned Technical Unit from/to the Elia Grid remains at a constant value or above a certain threshold thereby facilitating a planned maintenance on the grid for the purpose described in Article 4 paragraph 3 (i);
 - ensure the operational readiness of the Technical Unit for the purpose described in Article 4 paragraph 3(ii).
- 2. Before the deadline defined in the Terms and Conditions for the Scheduling Agent Elia may request to the Scheduling Agent of a particular Technical Unit, as introduced in Article 5 ii) a May-Not-Run on the Technical Unit in order to ensure that no active power or active power below a certain threshold will be produced or taken-off on the concerned Technical Unit, thereby facilitating a maintenance on the Elia Grid.
- 3. Elia can only request a Must-Run or a May-Not-Run if the Availability Status provided by the Outage Planning Agent for the Technical Unit is "available" and respecting the temporary active power capability restrictions during the period for which Elia requests the Must-Run or May-Not-Run.
- 4. The concerned Scheduling Agent may inform Elia of conditions that must be met in order to agree to the Must-Run or May-Not-Run requested by Elia according to the modalities specified in the Terms and Conditions for the Scheduling Agent.
- 5. If multiple efficient Must-Run or May-Not-Run are possible to reduce one of the risk monitored as described in Article 4, Elia will agree with the concerned Scheduling Agent(s) on the Must-Run or May-Not-Run that:



- most effectively reduces the risk underlying the requested Must-Run or May-Not-Run⁶,
- without creating (other) risks of grid security (as described in Article 4),
- and can be executed at the lowest cost.

TITLE 4 Congestion Management

Article 8. Purpose of Congestion Management

Elia manages Congestion risks on the Elia Grid in accordance with the purposes and requirements set in SOGL and CACM. The management of Congestion risks is based on the results of the Contingency Analyses and Operational Security Analyses as described in articles 34 and 72 of the SOGL using the Common Grid Models established in accordance with article 70 (1) of SOGL and article 17 of the CACM (see Whereas 23) and in accordance with the Methodology for the use of Dynamic Line Rating in the capacity calculation⁷. The national Congestion Management in specific serves the following purposes:

- i. Avoiding or resolving physical Congestions on the grid
- ii. Ensuring a level of security in line with the operational guidelines

Article 9. Remedial Actions used for Congestion Management

- 1. Elia can coordinate Technical Units in order to ensure availability of Remedial Actions for the concerned day by using the means for coordination as described in Article 5.
- 2. After the closure of the Day-ahead Market, identified Congestion risks can be resolved by the following actions (not listed in order of priority):
 - a. internal actions of Elia:
 - i. Amendment of the outage planning of a grid element (in accordance with article 22.1(a) of the SOGL).
 - ii. Topological modifications and/or tap changes of phase-shifting transformers (in accordance with article 22.1(b) of the SOGL).
 - b. By enforcing a specific Technical Unit or a group of Technical Units in a same Electrical Zone subject to the Terms and Conditions for the Scheduling Agent to return to their last valid Daily Schedule in case a deviation from this last valid Daily Schedule is observed in real-time in a direction that creates or aggravates a risk of Congestion. A return to Daily Schedule command is always coherent with the level and the direction of the CRI as defined in Article 16.

⁶ Meaning the goal is to achieve highest impact with lowest cost.

 $^{^{7}}$ Available on Elia website : https://www.elia.be/en/infrastructure-and-projects/our-infrastructure/dynamic-line-rating



- c. By requesting the activation of a RD Energy Bid available to Elia on Technical Units subject to the Terms and Conditions for the Scheduling Agent (in accordance with article 22.1(e) of the SOGL). More particularly these Remedial Actions concern the activation of an upward or downward RD Energy Bid on a Technical Unit with or without start-up or shut-down of the Technical Unit. The activation request by Elia of a RD Energy Bid respects the RD Energy Bid specifications as defined in the Terms and Conditions for the Scheduling Agent.
- d. by curtailment of the capacity of an electricity generating Technical Unit connected with flexible access and in accordance with article 61 of the Code of Conduct, and the specific applicable articles from the Belgian regional grid codes⁸.
- e. by the activation of Balancing Energy Bids for purposes other than balancing in accordance with article 29 of the Regulation (EU) 2017/2195 establishing a guideline on electricity balancing (hereafter referred to as "EBGL") and in line with the Terms and Conditions for the Balancing Service Provider.
- f. by Remedial Actions with neighboring TSOs:
 - by coordinating topological modifications and/or tap changes of phaseshifting transformers located in neighboring TSOs
 - ii. by Redispatching with one or more TSOs in accordance with article 22.1(e) of the SOGL;
 - iii. via Countertrading on one or more bidding zone borders in accordance with article 22.1(f) of the SOGL;
 - iv. by adjusting power flows through HVDC systems in accordance with article 22.1(g) of the SOGL;
 - v. in accordance with article 22.1(i) of the SOGL and article 72 of the CACM, by curtailment of already allocated cross-zonal capacity, which would only be allowed as a Remedial Action in the event of force majeure or if the Elia system is in emergency situation, if all TSOs at a given interconnector agree to such adjustment, and if Redispatching or Countertrading is not possible.
- g. by additional non-predefined Remedial Actions in accordance with article 22.2 of the SOGL.

ELIA RULES FOR COORDINATION AND CONGESTION MANAGEMENT

⁸ "Technisch Reglement Plaatselijk Vervoernet van Elektriciteit Vlaams Gewest" in Flanders,

[&]quot;Règlement technique pour la gestion du réseau de transport local d'électricité en Région wallonne et l'accès à celui-ci » in Wallonia and « Règlement Technique de transport régional d'électricité en Région de Bruxelles-Capitale » in Brussels



Article 10. Rules to choose between Curative, Preventive, or Restoring Remedial Actions

- 1. Elia can take Remedial Actions listed in Article 9 paragraph 2 as a Preventive, Curative, or Restoring Remedial Action.
- 2. As Curative and Preventive Remedial Actions are the result of an operational planning process, Elia prepares both in advance in order to be ready for activation if needed, regardless of the actual moment of activation.
- 3. Elia may take Curative Remedial Actions in specific circumstances:
 - if the expected overload is a Transitory Admissible Overload and, upon activation, the Remedial Action can be completely implemented within the defined duration of the Transitory Admissible Overload;
 - and if there is no significant risk that the Remedial Action will not be available after occurrence of the Contingency.
- 4. Elia may take Preventive Remedial Actions:
 - if the conditions in paragraph 3 are not met (for the activation of RD Energy Bids this is generally the case);
 - or for reasons of optimizing the grid topology (limited to Non-Costly Remedial Actions involving topology changes and specific phase-shifting transformer tap settings);
 - or for the purpose of international coordination in accordance with Article 11.
- 5. Given the limited defined duration of the Transitory Admissible Overloads (which is usually around one quarter-hour), Elia does not combine more than two Curative Remedial Actions for a single Contingency.

Article 11. Principles for the activation of Remedial Actions after closure of the Day-ahead Market

- 1. Elia selects appropriate Remedial Actions with the purpose of effectively and efficiently resolving the Congestion risk in accordance with article 21(2) of the SOGL.
- 2. Elia activates Remedial Actions as listed in Article 9 paragraph 2 according to the following principles:
 - A first categorization based on direct (quantifiable) costs differentiating between the categories of Non-Costly Remedial Actions and Costly Remedial Actions, with a preference for Remedial Actions with the lowest cost.
 - ii. Within each cost category of paragraph 1(i) and given Whereas 3, a categorization based on international impact with a preference for Remedial Actions without international impact. Remedial Actions with an international impact are subject



to coordination with other TSOs and the support of its Regional Coordination Centre (RCC) pursuant to whereas 3 and 5 and article 78(2) of the SOGL.

- 3. In exceptional cases, an indirect impact, meaning a non-quantifiable impact such as legal obligations or deadlines, safety measures, or organizational difficulty to reschedule, may cause a Remedial Action to shift to the end of the order list created based on the principles described in paragraph 2, meaning the action would be less preferred as Remedial Action vis-à-vis other Remedial Actions. Elia will justify the impact of such indirect impact when relevant via the report on Congestion Management described in Article 17 paragraph 2.
- 4. Elia reserves some non-costly topological actions (mainly PST taps range) for timeframes remaining after capacity calculation (closer to real-time) so that available Remedial Actions are sufficient to ensure Operational Security.
- 5. Elia will take into account the rules on priority of dispatch described in Article 14 when performing internal Redispatching using Technical Units available in accordance with Article 9 paragraph 2(cc).
- 6. Elia activates Remedial Actions in due time but as close as possible to the real-time in order to limit the impact of these Remedial Actions on the market taking into account the specificities and requirements for the activation of the Remedial Actions (such as the coordination with neighboring TSOs, RD Energy Bid specifications...)
- 7. Elia may deviate from the principles described in paragraphs 2-5 under specific circumstances, as reported in TITLE 5.

Article 12. Countertrading & cross-border Redispatching

- 1. The rules in paragraphs 2-10 are subject to changes following the entry into force of new methodologies as referred to in Whereas 8.
- 2. In anticipation of the entry into force and implementation of relevant common TSOs proposals for the methodologies developed in accordance with articles 35(1) and 74 of CACM and article 76 of the SOGL Elia may perform Countertrading or cross-border Redispatching in coordination with TSOs of neighboring Control Areas in compliance with the rules described in paragraphs 2 9. Concrete implementation of these rules may be further defined in bilateral agreements between Elia and the concerned TSO regarding Countertrading and/or cross-border Redispatching.
- 3. Each TSO has the right to reject requests for Countertrading or cross-border Redispatching from neighboring TSOs if leading to a violation of Operational Security limits or if insufficient local means (as described in Article 12paragraph 10) are available.
- 4. Each TSO may request Countertrading or cross-border Redispatching after the day-ahead coordinated security analysis in compliance with article 75 of the SOGL has been performed.
- 5. Elia may request Countertrading or cross-border Redispatching as a Preventive, Curative, or Restoring Remedial Action if in line with European methodologies for the concerned Capacity Calculation Region or with the bilateral agreement with the concerned TSO. In



bilateral agreements, Elia and the concerned TSO must agree on a minimum time between the activation request and the start of the activation.

- 6. The TSO requesting the Countertrading or cross-border Redispatching action can, in line with the modalities specified in article 26 §3 of CACM, decrease the intraday available transfer capacity on the affected border during the period of the activation and in the direction of the Congestion to ensure that further intraday allocations will not aggravate the Congestion risk, without jeopardizing the firmness of already allocated capacities.
- 7. The TSO requesting the Countertrading or cross-border Redispatching shall bear the net costs of the Remedial Action. Only if the Congestion is on a common tie-line, costs shall be shared equally between the involved TSOs.
- 8. Elia in agreement with the concerned TSO must specify the position of cross-border Redispatching and Countertrading within the order list of Remedial Actions created based on the principles described in Article 11. The position can be:
 - either Countertrading or cross-border Redispatching if no other effective and efficient Remedial Actions are available to Elia;
 - or a cost-based order of internal Remedial Actions and Countertrading or crossborder Redispatching if equally effective to solve the Congestion risk. In this case at least indicative prices are to be exchanged between the TSOs in order to enable a cost optimization by the requesting TSO.
- 9. If Elia is the TSO requesting the Countertrading or cross-border Redispatching, Elia may use the means described in Article 9 paragraphs 2 c), e), f(ii), or f(iii). In the specific case of a request for Countertrading on the Belgian United Kingdom border, Elia may also use the compensation mechanism as described in Article 13.
- 10. In case Elia receives a request for Countertrading or cross-border Redispatching from another TSO, Elia may use the means listed in Article 9 paragraph 2 c). In the specific case of a request for Countertrading on the Belgian United Kingdom border, Elia may also use the compensation mechanism as described in Article 13.
- 11. The bilateral agreements regarding Countertrading and/or cross-border Redispatching can foresee support of the Regional Coordination Centre if deemed valuable by the TSOs⁹.

Article 13. Activation of the compensation mechanism for the neutralization of the impact of the activation of RD Energy Bids on the system imbalance

 Elia aims to minimize the effect of Congestion Management on the system imbalance of the Elia Control Area via a compensation mechanism when requesting the activation of a RD Energy Bid(s) as a Remedial Action for internal Redispatching (as described in Article 9 paragraph 2 c) or Countertrading (as described in Article 9 paragraph 2 f(iii)) on the Belgium – United Kingdom border;

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⁹ For example, typically in the detection phase of the process



- 2. Elia abides by the principle of compensation providing there are no agreements on European level rendering the principle of compensation redundant.
- 3. The volume to be compensated due to the activation of RD Energy Bids and Countertrading on the Belgium – United Kingdom border equals to the net sum of all the RD Energy Bids and Countertrading action on the Belgium – United Kingdom border activated for the concerned quarter-hour.
- 4. The volume to be compensated as described in Article 13 paragraph 3 is one component considered by ELIA for assessing the need for compensation by using mFRR scheduled activation for the concerned quarter-hour according to the principles described in the Balancing Rules.

Article 14. Priority Dispatch

- 1. When activating downward flexibility as a Remedial Action in accordance with Article 9 paragraph 2 c) Elia will aim to comply with the requirements for Priority Dispatch for electricity produced from renewable energy sources or high-efficiency cogeneration described in article 13 of the Electricity Regulation. The priority dispatch can, however, not be a reason not to activate flexibility as RD Energy Bids.
- 2. Elia will prioritize electricity produced from renewable energy sources or high-efficiency cogeneration, provided that it does not increase the risks for a secure operation of the transmission grid. However, Elia will activate downward flexibility on such Technical Units according to the technical merit-order
- 3. When Elia activates downward flexibility on units producing electricity from renewable energy sources or high-efficiency cogeneration due to a lack of alternative actions available in accordance with the criteria in paragraph 2, Elia will stop the activation as soon as alternative actions become available.

Article 15. Cost-based Redispatching

- In execution of article 13.3 of the Electricity Regulation as referred to in Whereas 20, in these Rules Elia appeals to the exemption on market-based mechanisms and proposes the general use of a non-market-based mechanism for the activation of RD Energy Bids offered by a Scheduling Agent.
- 2. In accordance with article 13.7 of the Electricity Regulation downward flexibility on Technical Units connected to the grid with a flexible access and activated in accordance with Article 9 paragraph 2 d) will not be financially compensated except if otherwise foreseen in the Code of conduct or in the Belgian regional grid codes (whichever is applicable for the Technical Unit).
- 3. In accordance with article 13.7 of the Electricity Regulation and applying Article 9 paragraphs 2 c) Elia will accept the RD Energy Bid prices offered by a Scheduling Agent for the purpose of Congestion Management, in a non-market-based mechanism.



Article 16. Congestion Risk Indicator

- 1. Identification of Electrical Zones and Monitored Grid Elements:
 - Elia determines annually
 - A list of Electrical Zones
 - A list of Monitored Grid Elements per Electrical Zone
 - ii. Monitored Grid Elements are elements for which Elia has identified a relevant Congestion risk and that will be monitored during the process of CRI level determination as described in paragraph 2.
 - iii. Identified Monitored Grid Elements have to be cross-Electrical Zones elements. Grid elements inside an Electrical Zone are not considered as Monitored Grid Elements except if there is a relevant outage of a grid element that creates relevant Congestion inside an Electrical Zone. In this case, this grid element will be temporary added to the list of Monitored Grid Elements.
 - iv. Electrical Zones are determined based on the identification of Monitored Grid Elements according to the paragraph 1 iii). If a Monitored Grid Element is regularly identified inside an Electrical Zone, the Electrical Zone will be reorganized so that this Monitored Grid Element becomes cross-Electrical Zone. In case a Congestion is identified on a grid element in an Electrical Zone for a limited period of time due to temporary specific grid conditions, this grid element becomes a Monitored Grid Element during this period but this does not lead to a re-organization of the Electrical Zone.
- 2. Determination of Congestion Risk Indicator levels
 - i. After the coordinated security analysis for day D performed at day D-1 Elia determines Congestion Risk Indicators (CRI) using the methodology described in paragraph 2 iii), 1.iv) and vi).
 - ii. Elia shall update the CRI levels at least three times during day D for the remaining hours of day D using the methodology described in paragraph 2 iii), 1.iv) and vi).
 - iii. CRI levels determined by Elia are based on a check to see whether or not Daily Schedules for day D received after the closure of the Day-ahead Market and their updates received in ID or deviations from the Daily Schedules on day D could cause Congestions.
 - iv. Three levels of CRI are defined to reflect the Congestion risk associated to a change of net injection of active power in an Electrical Zone:
 - Low level: the Congestion risk due to a change of net injection of active power in the Electrical Zone is estimated as low;
 - Medium level: a Congestion risk is identified in case a change of net injection of active power in the Electrical Zone occurs in the direction of the CRI level and is higher than the Zonal Active Power Cap;



- High level: a Congestion risk is identified for any change of net injection of active power in the Electrical Zone in the direction of the CRI level;
- v. CRI levels are determined by Elia:
 - For each hour of day D
 - For each Electrical Zone
 - In each direction¹⁰
- vi. The CRI level determination follows a two-step approach:
 - A global N-1 security analysis based on the most up-to-date Daily Schedules and forecasts. In case a Congestion on a Monitored Grid Element is detected, Elia identifies the direction of the cross-zonal power flow leading to the Congestion of this Monitored Grid Element and declares the concerned Electrical Zone(s) as High level in the concerned direction(s) that would aggravate the Congestion.
 - A zonal N-1 security analysis per Electrical Zone, per direction and per hour to analyze the impact of an increase/decrease of net injection of active power on Monitored Grid Elements. The net injection of active power is gradually increased/decreased until one of the Monitored Grid Element is overloaded. The increase/decrease of active power leading to this overload corresponds to the Zonal Active Power Cap in the concerned direction:
 - In case the Zonal Active Power Cap is lower than a specific threshold Elia declares the concerned Electrical Zone as a Medium level in the concerned direction.
 - In case the Zonal Active Power Cap is higher than a specific threshold, Elia declares the concerned Electrical Zone as a Low level in the concerned direction.
 - This specific threshold is determined in the zonal N-1 security analysis step by calculation of the remaining flexibility in each Electrical Zone.
- vii. In case a Medium CRI level is determined in an Electrical Zone as per paragraph vi), the Zonal Active Power Cap is continuously updated after every update of Daily Schedule occurring in this Electrical Zone according to the resulting additional increase/decrease of net injection.
- 3. Use of Congestion Risk Indicator levels

¹⁰ In this document, upward direction refers to an increase of net active power injection and downward direction refers to a decrease of net active power injection



- i. Elia uses the CRI levels as an input for evaluating the need of Remedial Actions as described in Article 9 paragraph 2 c) when a Scheduling Agent provides an update of the Daily Schedule of a Technical Unit in an Electrical Zone.
- ii. Elia uses the CRI levels as a basis for the filtering of the delivery points included in Balancing Energy Bids that are in a dedicated Electrical Zone according to the rules described in the Balancing Rules and in the Terms and Conditions for the Balancing Service Provider to avoid aggravating a Congestion risk.
- iii. Elia uses the CRI levels as a basis to determine the possibilities for Technical Units to deviate from their Daily Schedules in real-time in the concerned direction:
 - Low level: Elia does not impose any limitations on Technical Units to deviate from their Daily Schedules in real-time;
 - Medium level and High level: Elia does not authorize Technical Units to deviate from their Daily Schedules in real-time.
- 4. Elia informs the concerned Scheduling Agents and Balancing Service Providers of the CRI levels once determined in day D-1 or updated during day D according to the modalities of Article 18.

TITLE 5 Reporting

Article 17. Monitoring

- 1. As proposed in response to the incentive on "Improvement of transparency as regards the detection and management of Congestion" defined in the CREG decision (B)658E/52 of 28 June 2018, Elia will send a quarterly report on Congestion Management to CREG covering a period of three months, within one and a half months after the end of the concerned period. This report will contain the following information:
 - a. Information on the quality of the following forecasts used as operational input data for the creation of the Individual Grid Models (IGM):
 - Quality of production forecasts calculated based on a comparison of the forecasts with real-time measurements, categorized based on production type;
 - ii. Quality of forecasted data of grid topology based on a comparison of the forecasts with real-time measurements, for the following grid elements: phase-shifter transformers at Zandvliet and Van Eyck, bus bar couplers at the 380kV stations of Horta, Avelgem, Courcelles.
 - iii. Quality of Total Load forecasts based on a comparison of the Total Load forecast with real-time measurements, a comparison between the load forecasts in day-ahead and in intraday, and information on the correction of the Total Load forecasts for use in the files of the Common Grid Model.



- iv. Quality of Residual Load forecasts based on a comparison of the Residual Load forecast with real-time measurements and a comparison between the Residual Load forecasts in day-ahead and in intraday.
- b. Information on the quality of output data:
 - Quality of load flow calculations for Congestion Relevant Grid Elements based on a comparison between the Common Grid Model files that Elia received from the Regional Coordination Centre (RCC) and real-time measurements.
 - ii. Quality of forecasted data on international flows based on a comparison with real-time measurements.
- c. Information about the timing, power, location, and purpose for activations of Costly Remedial Actions by Elia. This information will also respond to the requirements on reporting in article 13.4 (b) of the Electricity Regulation.
- d. Historical values from previous quarterly reports of a selection of relevant KPIs.
- 2. In accordance with article 22.2 of the SO GL Elia will send a report to CREG on the use of and justification for additional Remedial Actions as described in Article 9 paragraph 2. Elia will add this information to the quarterly report on Congestion Management referred to in paragraph 1.
- 3. Elia will once per year report to CREG the information requested in accordance with article 13.4 (a and c) of the Electricity Regulation regarding developments towards market-based Redispatching and towards a reduction of the need for downward Redispatching of generating installations using renewable energy sources or highefficiency cogeneration.
- 4. Considering the cost-based approach for Redispatching following Article 15 paragraph 1, Elia will include in the reporting described in paragraph 1.c) the information requested in accordance with article 13.6 of the Electricity Regulation regarding the activations and justification for downward Redispatching using Technical Units subject to the priority of dispatch described in Article 14.
- 5. Elia will once a year make a report containing relevant indicators concerning the determination of the CRI levels and the impact on the Balancing Energy Bids as well as the updated list of Electrical Zones and Monitored Grid Elements.
- 6. Elia will once per year report to CREG the information regarding the change in Daily Schedule on Technical Unit level in the direction for which a CRI is indicated as Medium or High.



Article 18. Publication of information

- 1. Elia shall publish information via the ENTSO-e transparency platform in accordance with Whereas 15 and 16 regarding :
 - a. Congestion Management measures
 - b. Unavailability of generation and production units
- 2. In accordance with article 22.2 of the SO GL Elia will publish on its website the report sent to CREG in accordance with Article 17 paragraph 2 on the use of additional Remedial Actions, including its justification.
- 3. Elia shall publish on its website a quarterly report containing the information described in Article 17 paragraph 1a) and b) and relevant information about the activation of Costly Remedial Actions by Elia described in Article 17 paragraph 1 c). More specific the following information will be published:
 - a. KPI on the quality of forecasts used as operational input data for the creation of the Individual Grid Models (IGM)
 - b. KPI on the quality of output data
 - c. Information about the timing, power, location, and purpose for activations of Costly Remedial Actions by Elia (including activations for downward Redispatching using Technical Units subject to the Priority Dispatch)
 - d. Historical values of a selection of relevant KPIs.
 - 4. Elia shall publish on its website for information purposes only the CRI level and Zonal Active Power Cap of each Electrical Zone.¹¹
 - 5. Elia shall publish the annual reporting described in Article 17 paragraph 5

TITLE 6 Final Provisions

Article 19. Language

The reference language for these Rules shall be English. For the avoidance of doubt, where Elia needs to translate this proposal into the national language(s), in the event of inconsistencies between the English version published by Elia and any version in another language, the English version shall prevail and Elia shall, in accordance with national legislation, provide the relevant national regulatory authorities with an updated translation of the proposal.

¹¹ The information regarding whether the CRI level of a zone is high or medium for a particular hour of a day is also sent to the relevant market parties through an automated B2B push communication. The information regarding whether the CRI level of a zone is high or medium through the automated B2B push communication will prevail over the information that will be published on the Elia website for a particular hour of a day.