



Power Consumption Forecast Challenge

Conditions of Participation

Participation in this challenge implies acceptance of these Conditions of Participation.

Article 1. Organisation

Company:

RTE-Réseau de transport d'électricité

Public Limited Company with management board with Share capital of 2,132,285,690.00 EURO
Company registered at the RCS Nanterre (Commercial Registry) under no. B 444 619 258
SIRET No. 44461925800023,
Whose registered office is at 1 Terrasse BILINI-Tour Initiale-TSA 41000
92929 Paris la Défense CEDEX

Is the organizer (hereinafter "Organizer") of this challenge (hereinafter the "Challenge").

The latter will run from 10/05/2017 to 31/07/2017 inclusive, with 18,000 Euros at stake, which will be awarded according to the conditions described in the description of the Challenge, to appoint the winner(s).

Article 2. Purpose and principle of the challenge

The description and objectives of the challenge can be found on the datascience.net website on the Challenge Description tabs.

Article 3. Description and Awarding of the lots

The methods and stages for naming the winners can be found on the datascience.net website on the Challenge Description tabs.

Article 4. Modification of the rules

The Organizer reserves the right to cancel, postpone, extend, shorten or modify, in whole or in part, the organization of the Challenge if the circumstances so require it, without having to justify this decision and without incurring any liability whatsoever.

Article 5. Exceptional Circumstances

The Organizer cannot be held responsible if this Challenge is stopped in the event of force majeure, and cannot be held responsible for any problems related to the delivery of the mail. Cases of force majeure are those usually recognized by the jurisprudence of the courts. The Organizer reserves the right to cancel this Challenge at any time, without any claim being made in respect of moral or financial damage by the participants in the Challenge.

Article 6. Scope of application

These Challenge Rules are applicable between “the Organizer” and any person registering for a Challenge, hereinafter referred to as “the Participant”.

When participating in the challenge, the acceptance of these Rules will be demonstrated by ticking the box corresponding to the following sentence: “I have read and accept the conditions for participation in the challenge.” The Participant acknowledges by the same fact being fully aware and accepts it without restriction. Ticking the above box will be deemed to have the same value as a handwritten signature.

These Challenge Rules have a supplementary value. They shall apply to the relationship between the parties in the absence of a specific agreement between the Participant and the Organizer.

Article 7. Definitions

“Datastorm”: Datastorm, a subsidiary of the Group of National Schools in Economics and Statistics, acting as host.

“Challenge”: Contest organized by the Organizer on the Site and in which the Participants may participate in order to win prizes. The characteristics of the Challenge are defined in the Particular Conditions of the Challenge listed on the registration page of each Challenge.

“Private Challenge”: Challenge for which the participation of the Participant is subject to the discretionary validation of the Organizer.

“Public Challenge”: Challenge in which all Participants may participate without prior validation by the Organizer.

“Study Data”: Raw information of any kind submitted by the Organizer to the Participant in the context of a Challenge for the purpose of completing a Performance. They are mainly composed of Weather Data.

“Weather Data”: Weather Data provided by Météo France to RTE and made available to the Participants for use in the Challenge. This Weather Data is part of the Study Data and thus subject to a confidentiality regime defined by Météo France.

“Winner”: Participant who has won a Challenge. The number of Winners and the corresponding Prizes are determined by the Organizer in the Particular Conditions of the corresponding Challenge.

“Model”: Method used to achieve the Performance. In particular, it may be in the form of software, algorithms, database, method or presentations.

“Methodological Note”: Document A4 explains the Performance and the Model whose composition is specified in Appendix 1.

“Organizer”: Any person, legal or physical, under public law or private rights, registered on the Site in order to propose a Challenge.

“Performance”: Result of the Participant’s study obtained on the basis of the Study Data aiming to solve the problem posed in the framework of a Challenge. The Performance is in the form of a file with forecasts of the consumption value. This Performance is sent to Datastorm every day on the days for which a forecast is expected within the framework of the Challenge.

“Platform”: Operational function of the Site allowing the Organizer to propose a Challenge and the Participants to participate.

“Prize”: Goods and/or sum of money given by the Organizer to a Winner after the Challenge.

“Participant”: A physical person of legal age registered on the Site for the purpose of participating in a Challenge. This physical person may act in his own personal capacity or by representing a legal person.

“Site”: Web site accessible at the URL www.datascience.net, as well as the sub-sites, mirror sites, portals and variations of URLs relating thereto.

Article 8. Purpose

These Challenge Rules govern the legal relationship between the Organizer and the Participant during the course of the Challenge.

Article 9. Conditions of Participation

Each Participant acknowledges, by participating in the Challenge, not having privileged information or particular facilities putting him in a privileged position compared to the other Participants.

In general, the Organizer shall ensure that no participant has privileged and discriminatory access to information relating to the implementation of the Challenge.

In this respect, the Organizer reserves the right to refuse the application of a Participant in order to guarantee equal treatment between the Participants, provided that this decision is notified as soon as possible and mentions the reasons for such motivation. The Participant then has a period of seven working days from the date of receipt of the decision to present his remarks to the Organizer and to contest the decision. The Organizer shall decide on this claim within one week of its receipt.

RTE staff members may participate in the Challenge, only on a personal basis. RTE staff members are all employees working in the company, i.e. employees with permanent or fixed-term contracts, statutory or non-statutory contracts, temporary staff, trainees and students working on a thesis and working with RTE, whether or not the latter are bound by an employment contract with RTE.

In view of RTE's obligations relating to Articles L. 111-9 to L. 111-39 of the Energy Code, Individual Participants representing the Vertically Integrated Undertaking or a company controlled by the Vertically Integrated Undertaking may not compete. Such individuals may nevertheless participate in their own personal capacity.

Datastorm reserves the right to request at any time the supporting documents it deems necessary for the validation of applications (first and last name, address, etc.), in particular when awarding Prizes. Any Participant who does not fulfill these conditions or refuses to justify them within two weeks of the application will be excluded from the Challenge and will not be able to accept the prize if they win.

Article 10. Obligations of the Organizer

10.1 Making Study Data available

Within the framework of the organization of the Challenge, the Organizer submits a scientific problem to the Participants. To this end, the Organizer shall make available to the Participants in the virtual space dedicated to the Challenge:

- all information concerning the variable to be estimated;
- the Study Data, in the form of data files whose structure and content are specific to each Challenge;
- The Participant may carry out any study, processing, calculation with his own tools and his own material on the basis of this data, in order to submit the Performance within the framework of the Challenge.

Participants may use any other data, provided that the nature and source of the data are indicated in the methodological note and third-party rights to the data have not been violated.

Participants are however prohibited from using the D-1 forecast published by RTE, regardless of the medium of this publication.

10.2 Designation of the Winners

The Organizer undertakes to name the winner(s) at least 15 days after the results of the Challenge mentioned in the Particular Conditions of the Challenge.

This designation must be carried out in accordance with the objective conditions listed in the Particular Conditions of the Challenge.

10.3 Sequestration and Awarding the Prize

The publication of a Challenge by the Organizer on the Site is conditioned by the delivery to Datastorm by the Organizer of the Prize to be awarded to the Prize Winner(s).

The Prize is sequestered by Datastorm throughout the duration of the Challenge.

After the designation of the winner(s) by the Organizer, and no later than 30 September 2017, Datastorm will, on behalf of the Organizer, remit the Prize to the Prize Winner(s).

Article 11. Obligations of the Participant

11.1 Publication of the Performances for participation in the Challenge

The evaluation of the Performance and its publication within the virtual space dedicated to the Challenge is a necessary condition for the Participant to be designated as the Challenge Winner. The Performance can then be viewed by all the Participants in the Challenge. Only the Results are unveiled. The Model used to achieve the Result is not hosted on the Site.

11.2 Disclosing the methodological note to the Organizer

If participant's Result has been ranked among the first 3, he agrees to disclose a Methodological Note describing the Model to the Organizer.

11.3 Confidentiality

11.3.1 Confidentiality obligations pertaining to all of Study Data

The parties agree to consider as confidential all the Study Data submitted to the Participants within the scope of the Challenges.

For this purpose, the Participant agrees to:

- protect and keep confidential this information:
- not to use the confidential information for any purpose other than for implementation and/or execution of the Challenge;
- Maintain the forms of intellectual property, confidentiality, prohibition of copying or any other proprietary or confidential statements appearing on the various elements communicated by RTE in connection with the implementation and execution of the Challenge.

In addition, the Participant may not:

- make any disclosure whatsoever, to any third parties, of this confidential information, except by prior and express written consent from RTE;
- make copies, reproductions or duplicates of all or part of this confidential information, except by prior and express written consent from RTE;
- file an intellectual property title on this confidential information of which they are not the owner, without the prior written consent of RTE;
- avail itself of any assignment, grant of license or any prior right of possession, as defined by the Intellectual Property Code, on such confidential information, as a result of the disclosure of the Confidential Information;

Information which, prior to disclosure by RTE, is already held or known to the Participant without confidentiality or restriction of use in respect of the Participant, is not considered confidential, provided that evidence is provided of such

11.3.2 Confidentiality obligations specifically on the Weather Data provided by Météo-France

Each Participant in the present challenge organized by RTE, and duly authorized for this purpose, formally agrees:

- not to use the Weather Data, provided by Météo-France to RTE, except for purposes of the Challenge, for developing a forecasting model;
- not to disseminate, distribute, deliver, supply or edit value-added meteorological products or services, which are not intended to constitute the simple internal use of the Weather Data under the conditions defined above,
- not to provide any third party with any Weather Data provided by Météo-France, as it stands or in any way restored, in any manner and on any medium during and after the expiration of this commitment,
- not to propose any product or service likely to make it possible to recover the Weather Data provided by Météo-France during and after the expiration of this License free of charge or subject to payment,
- not to propose to any Third Party any product or service in which the use of the Weather Data provided by Météo-France can be unambiguously identified during and after the expiration of this commitment free of charge or subject to payment,
- not to propose to any Third Party any product or service that has a meteorological character (service or product whose content or result varies according to the Meteorological Services provided by Météo France), during and after the expiration of this commitment free of charge or subject to payment.

11.4 Loyal participation and hold harmless clause

The Participant agrees to participate lawfully and fairly in the Challenge and not to distort the results of the Challenge by methods which do not allow the Organizer to be offered the best usable Model.

In this spirit, the Participant specifically may not:

- post random contributions in bulk and based on calculated results to find the best datasets
- produce the result manually without scientific basis
- use a Model for which he does not hold the intellectual property rights.

The participant warrants that by participating in the Challenge, he has respected and will respect the intellectual property rights of third parties, including copyright, design rights, and patent and trademark rights.

Failing this, if the Participant is co-owner of the Model, or is not the holder of any intellectual property rights on the Model, the latter agrees to obtain prior written authorization of the co-owner or the owner of the rights in order to participate in the Challenge (in particular in the case of representation of a legal person).

Article 12. Intellectual Property

12.1 Intellectual property on the Study Data

The Organizer remains the owner of all rights to the Study Data submitted to the Participants within the scope of the Challenge.

12.2 Intellectual property on the Models and the Methodological Note

12.2.1 Intellectual property of the Non-Winning Participant

The Non-Winning Participant retains all rights to the Model and the Performance which has been submitted to the Organizer as part of the Challenge.

He grants to RTE a license for use free of charge on his Results, for the entire term of legal protection of the Intellectual Property rights.

12.2.2 Intellectual property of the Winning Participant

12.2.2.1 Rights Assigned

The Participant grants to the Organizer, on a non-exclusive basis, a license to use the Methodological Note and the Results.

a) Duration of the assignment

The assignment of the license is granted to the Organizer as of the submission of the Results and the unveiling of the Methodological Note for the duration of the intellectual property. The duration of intellectual property shall be understood to be the duration prescribed by the Intellectual Property Code and foreign laws and any extensions or extensions thereof by an international convention, a European directive, a French or a foreign law.

b) Geographical scope of the assignment

This assignment is granted for the whole world and for all languages, for all the modes of use provided for in this contract.

c) Rights Assigned

It is specified that the Methodological Note and the Results are intended for purely internal use by RTE, excluding any commercial exploitation. The assignment of the license includes a reproduction right which includes:

- The right to reproduce the Methodological Note by any electronic and mechanical methods known or unknown to date, in particular optical, magnetic and digital;
The transfer of the license also includes a right of adaptation which includes:
- the right to correct, improve and modify the Methodological Note in whole or in part;
- the right to make any modifications necessary to exercise the rights assigned;
- the right to translate the Methodological Note into any language;
- the right to separate the Methodological Note or one of its elements from the whole.

The Participant acknowledges that the adaptations and developments of the Methodological Note made by the Organizer under the License for use, are the exclusive intellectual property of the Organizer. The Organizer reserves the right to use and exploit these adaptations and developments of the Methodological Note.

12.2.2.2 Rights Reserved

The Winning Participant retains the rights for use and exploitation of the Model and the Methodological Note.

The Winning Participant also retains all of his moral rights in the Model and Methodological Note.

Article 13. Free participation in the contest

Participation in the Game is entirely free of charge, so that any participant may obtain on request the reimbursement of the expenses he had to lay out in order to participate, according to the terms and conditions set forth below.

Datastorm agrees to reimburse the participation fee to any person who has participated in the Contest, who has complied with the conditions of participation in the Contest and who has made a written request (by ordinary mail) to Bluestone, 55 rue du Faubourg Montmartre 75009 Paris, no later than sixty (60) days after the date of participation in the Contest.

This request should include all of the following elements, under penalty of refusal:

- Participant's proof of identity;
- The accuracy of the date, time and duration of his connection to the Contest Interface for the purpose of participating in the Contest;
- a copy of the detailed invoice provided by the telephone company and/or internet service provider, clearly showing the date and time of his connections to the Contest Interface, and in particular the time of connection to, and disconnection from, the Contest Interface;
- a bank account statement if the one wishes to be refunded by bank transfer. Otherwise, the participant will be reimbursed by check.

Reimbursement of connection fees will be made under the following conditions:

- **Free or flat rate connection:** currently most Internet service providers offer free and unlimited connection to Internet users, subject to payment of a monthly subscription (ADSL, cable, optical fiber, etc.). In this case, any access to the Contest Interface by an Internet user holding such a subscription, in particular for participation in the Challenge, will not give rise to any refund, since connecting to the Contest Interface and participating in the contest does not incur any additional fees.
- **Paying connection:** in the event that a participant in the Contest does not have an unlimited Internet connection as described above, but whose connections are billed pro rata for the duration of the call, then Datastorm will refund the costs for connecting to the Contest Interface, on the basis of a fixed charge corresponding to a local call in off-peak hours at the current rate of a connection time of 10 (ten) minutes.

The postal charges incurred by the request for reimbursement will be reimbursed upon written request attached to the reimbursement request, on the basis of the slow postal rate in effect at the time of the request.

The cost of photocopies will also be reimbursed at the participant's request.
Datastorm will only grant one (1) request for reimbursement.

The reimbursement will be made within two (2) months from receipt of the participant's request.

The amendment of these rules will also entitle the participants to apply for a new reimbursement under the same conditions and on the same terms, as a result of the consultation of the new rules.

In the event of any extension or postponement of the Contest, the deadline for claiming the refund will be postponed accordingly.

Article 14. General Provisions

14.1 Applicable Law

These rules are subject to application of French law.

14.2 Amicable settlement of disputes

Any disputes that may arise in connection with this contract shall be submitted to Datastorm for mediation before any legal action is taken in order to reach an amicable settlement.

However, if no outcome was found within thirty (30) days of the mediation request by the most diligent Party, exclusive jurisdiction shall be assigned to the French courts.

14.3 Integrality

The nullity of one of the clauses of this contract will not invalidate the other clauses of the contract or the contract as a whole, which will retain their full effect and scope. In such a case, the parties shall, as far as possible, replace the annulled stipulation with a valid provision corresponding to the spirit and purpose of this agreement.

14.4 Non-Waiver

The absence of exercise by the Parties of the rights recognized herein shall in no case be interpreted as a waiver of such rights.

14.5 Agreement on Evidence

Items relating to navigation and electronic notifications will be kept and archived by Datastorm.

Each party may avail itself of such, in particular for probative purposes. Said forms of proof constitute a presumption which can be reversed only if there is evidence that Datastorm's means of registration, storage and notification were in fact faulty.

APPENDIX 1: METHODOLOGICAL NOTE

In order to be awarded the prize, the highest ranked participants will be required to explain the following points concerning the forecast model used in the challenge:

Type of model used (parametric regression, nonparametric regression, time series, decision trees, neural networks, Bayesian network, graphs...)

Number of models used: one per region? One per hour? One per day type? One per season?

Modelling steps: explain how missing values were treated, what explanatory variables were used, how variables and models were selected (ridge regression, Lasso, principal component...), model comparison criteria, how overfitting was avoided...

Data used for modelling and forecasting (other than the data made available): specify the source, the nature, the domain (public or private), historical or forecasted data, how far back the data goes, test samples...

Programs and tools used (mentioning whether a license is required)

Intellectual property rights (other than the participant's)

How adapted the model is to an operational context: model learning time, time required to build a forecast, whether learning is performed online or offline, possibility of using live calibration data (data availability, feasibility of obtaining data streams)...