

CENACE
CENTRO NACIONAL
DE CONTROL DE ENERGÍA



Centro Nacional de Control de Energía (Mexico)

And

Empresa de Pesquisa Energética

**Memorandum of Understanding for
Technical Cooperation**

31 January 2017

Two handwritten signatures in blue ink, one appearing to be a stylized 'J' and the other a more complex scribble.

This Memorandum of Understanding for Technical Cooperation ("**Memorandum**") is signed on 31 January 2017 by and between the following Participants:

Mexico's Centro Nacional de Control de Energía ("**CENACE**")
Registered Address: 32 Don Manuelito Street, Olivar de los Padres, Ciudad de México, México

Authorized Representatives:

Eduardo Meraz Ateca

General Director

AND

Empresa de Pesquisa Energética ("**EPE**")
Registered at CNPJ/MF nº 06.977.747/0001-80
Registered Address: 01, Rio Branco Ave, Rio de Janeiro, Rio de Janeiro, Brazil

Authorized Representatives:

Luiz Augusto Nóbrega Barroso
Amilcar Gonçalves Guerreiro

General Director
Director of Studies of Electrical Energy

(Centro Nacional de Control de Energía and Empresa de Pesquisa Energética collectively the "**Participants**" and individually "**Participant**")

WHEREAS for the purpose of fostering the cooperation of the Parties and building up an even closer relationship among the Centro Nacional de Control de Energía and Empresa de Pesquisa Energética agree to take further their existing cooperation and exchange for building up a long-term technical cooperation.

Through friendly negotiation, the Participants agree as following:



1. Purpose of the Memorandum

1.1 The Participants intend to develop and promote cooperative partnership, conduct mutually beneficial information exchange, and jointly pursue technical exchange and cooperation opportunities, all regarding electrical energy and always under good faith principles.

2. Scope of cooperation

The Participants intend to study the possibility of:

2.1 Sharing EHV and/or UHV power grid planning and operational experiences and collaborate to enhance the reliable operation and control of large power systems; including information technology automation for both the normal state and the emergency situations;

2.2 Sharing experiences on planning and operation strategies to reliably support large scale renewable energy integration, including but not limited to wind, solar, and biomass energy;

2.3 Studying jointly the coordination mechanisms of electric power generation and power grids, including the impacts of natural gas supply systems on this coordination;

2.4 Sharing experiences on technical and economic assessment and methodological aspects of generation and transmission, transformation and reactive power compensation planning, including the mechanisms to ensure resource adequacy

2.5 Sharing experiences on specialized training for human capital.

3. Nature of exchange

3.1 A Senior Management Liaison Person in each organization shall be appointed as an institutional point of contact.

3.2 Likewise, for each of the task forces, projects or areas of cooperation agreed by all the Participants, a Senior Management Liaison Person directly involved in those issues shall be appointed in each organization as a technical point of contact.

3.3 Exchange at the senior management level

While leveraging the use of information and communication technologies, senior management of each of the Participants shall make bilateral visits from time to time in order to exchange views related to the development and



trend of the electricity business and the cooperation of the Participants.

3.4 Exchange at the professional level

Within practicable limits, information and material relating to the power market, power systems and corporate operation and management (save for those of a confidential nature or patented) shall be exchanged.

3.5 Mechanism of communication

The Participants shall establish a bilateral exchange and communication mechanism for working out plans for exchange and cooperation in technical and management areas and staff training. The Participants shall get together at least on an annual basis in a high-level meeting, to formulate their yearly cooperation plan, review the implementation of such plan, and jointly resolve common issues arising from their cooperation, and to point out new ways to expand their collaboration.

3.6 Cooperation at the international level

The Participants agree that they shall each make use of its strengths in international cooperation so that they may join forces in exploring cooperation at the international level with a view to establishing a lasting international cooperation platform.

4. Confidentiality

4.1 The term "Disclosing Participant" means a Participant hereto disclosing its confidential information to the other Participants. The term "Receiving Participant" means a Participant hereto to whom such a disclosure is made.

4.2 For the purpose hereof, the term "Confidential Information" means all information disclosed in the course of the meetings or other occasions by the Disclosing Participant to the Receiving Participant in electronic, written, graphic, photographic or recorded form; or any information orally communicated by the Disclosing Participant, and marked as confidential, provided, however, that the following information shall not be constituted as confidential information:

- a. Any information which was generally available to the public at the time of disclosure, or information which becomes available to the public after disclosure by the Disclosing Participant other than through fault of the Receiving Participant;
- b. Any information which was already known to the Receiving Participant prior to its receipt from the Disclosing Participant;



- c. Any information which is obtained at any time lawfully from a third Participant under circumstances permitting its use or disclosure to others; and
- d. Any information which is developed independently by the Receiving Participant other than through knowledge of the confidential information as evidenced by written records.

4.3 Nothing contained in this Memorandum shall be construed to mean that either Participant shall have an obligation to disclose any confidential information requested by the other Participant. Subject to execution of a separate agreement, the confidential information requested by the Receiving Participant which is out the scope of this Memorandum, may be disclosed by the Disclosing Participant to the Receiving Participant, in its sole discretion.

4.4 The Receiving Participant shall not disclose confidential information to any third Participant without the prior written consent of the Disclosing Participant, and shall not use such confidential information for any purpose other than the purpose outlined in this Memorandum.

4.5 Each of the Participants will obtain prior written authorization from the other Participant in case one of them intends to disclose confidential information to its affiliates. The Participant whose affiliate has access to this confidential information is compelled to inform its affiliate of the confidentiality commitments contained in this document and will hold liability for any breach by its affiliate of the confidentiality obligations in this Memorandum as established in this clause.

4.6 The Receiving Participant may disclose to any third participant confidential information that is required to be disclosed by law or regulation or in response to a valid order of a court or other governmental body, but only to the extent of and for the purpose of such law, regulation or order, and only if the Receiving Participant promptly notifies the disclosing participant in writing of such required disclosure and uses it best efforts to seek an appropriate legal remedy including, without limitation, a protective order to maintain the confidentiality of confidential information or minimize disclosure thereof, and permits the disclosing participant, at its expense, to seek such legal remedy.

5. Intellectual property rights

5.1 Each shall recognize and respect the intellectual property and reputation of the other Participants. Each Participant agrees not to use the intellectual property, the logo(s) and/or trademark(s) of the other



Participants without prior written approval. The intellectual property rights obtained during implementation of this Memorandum shall be negotiated between the Participants and defined in a specific cooperation agreement based on the cooperation scope provided for in Article 2.

6. Costs sharing

6.1 No financial obligation or provision of human resources by any of the Participants is contemplated in the Memorandum, and will depend on the manpower available to the Participants. Each Participant will cover its own costs incurred in the development of projects or any other action related to this Memorandum, unless specific funding becomes available for projects of mutual interest to be selected by the Participants, in common agreement.

7. Language

7.1 The English language shall be used for the activities under this Memorandum. Where appropriate, the Participants shall agree on the use of translations and interpretations in order to facilitate extensive and comprehensive participation. One version might be written down in the Portuguese language and another version in the Spanish language. In the event of a discrepancy or difference in interpretation among the said versions, the English version shall prevail.

8. Points for liaison

8.1 Points for liaison:

CENACE		EPE	
ATTN:	Mr. Juan Roberto Lozano Maya	ATTN:	Mr. Rafael de Sá Ferreira
ADDRESS:	Blvd. Adolfo López Mateos 2157, Piso 8, Col. Los Alpes, Delegación Álvaro Obregón, C.P. 01010, Ciudad de México	ADDRESS:	Rua Rio Branco, 01, Centro, Rio de Janeiro, RJ, Brazil
E-MAIL:	Roberto.lozano@cena ce.gob.mx	E-MAIL:	rafael.ferreira@epe.gov.br
TEL:	+52 5595 5400 ext. 51141	TEL:	+55 21 3512 3136

9. Term for the exchange and cooperation program

9.1 This Memorandum shall take effect from the date of signing for a period of 3 years, to be automatically extended upon expiration. The Participant terminating this Memorandum early shall give the other Participants not less than three months notice in advance.

9.2 The present Memorandum may be amended through written agreements between the Participants, provided that the terms and scope described on Article 2 are respected.

9.3 Modifications shall enter into force on the day of the signature of such written Amendments, which shall be attached to this memorandum.

10. Governing law.


10.1 The joint scientific cooperative activities under this Memorandum will be subject to the applicable laws, rules and regulations of the respective Participants.

11. Dispute resolution and interpretation


11.1 All differences regarding the interpretation and implementation or application of this Memorandum shall be settled amicably by consensual negotiations through diplomatic channels between the Participants.


IN WITNESS THEREOF, the Participants execute this Memorandum in two original copies (one for each Participant) on Rio de Janeiro, Brazil, on 31 January 2017

**Centro Nacional de
Control de Energía**


Eduardo Meraz Ateca
General Director

**Empresa de Pesquisa
Energética**


Luiz Augusto Nobrega Barroso
General Director


Amílcar Gonçalves Guerreiro
Director of Studies of
Electrical Energy