"Moroccan electricity sector regulation"

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Energy today has to be...

Sustainable

Reduce emissions to fight climate change, and contribute to cost reductions of low carbon technologies

Secure

Ensure reasonable energy costs for households and avoid loss of competitiveness for industry

Affordable

Maintain system stability, meet future energy demand, assure independence
Morocco's integration into the Euro-Mediterranean electricity market;

Building confidence of donors, ENR investors and industrial customers electricity-intensive

The transparency of the entire Moroccan electrical system:
- Market opening,
- Unbundling,
- Regulation.

Enable the electricity sector to be transparent to the international market signals, to attract domestic and foreign private investment for its development, and to increase its competitiveness in order to guarantee consumers a secure and cheaper supply.
Regulatory framework Evolution
Regulatory framework Evolution of the Moroccan electricity system

- **ONE has the power production > 300 kW**
  - 1963

- **Introduction of independent production**: ONE empowered to pass, after competitive bidding, agreements with legal persons of private law, for the production >10 MW
  - 1994

- **Morocco-Spain**: The second 400kV line, exchange capacity to 1400 MW
  - 2006

- **Morocco-Algeria**: The second 225kV (200 MW)
  - 2009

- **Law No. 40-09 for ONEE**: consolidation, ONE and ONEP
  - 2011

- **Amendment of the 13-09 law**: acquisition of surplus and opening the low voltage
  - 2015

- **Opening of the electricity market (Renewable energies)**
  - 2016

- **Self-production to 50 MW**
  - 1963

- **Sale of surplus to the ONEE, Grid access to 50 MW**
  - 1988

- **Morocco-Spain**: The first 400kV line, exchange capacity 700 MW
  - 1994

- **Law 13-09**: Opening of the electricity market (Renewable energies)
  - 2006

- **Grid Access VHV, HV and MV**
  - 2009

- **Law 54-14 (2014)** self-production > 300 MW (Grid access, surplus sold exclusively to ONEE)
  - 2011

- **Decree on conditions for access to MV network**
  - 2015

- **Morocco-Algeria**: The third 400kV line, exchange capacity 1200 MW
  - 2018

- **Morocco-Spain**: The second 400kV line, exchange capacity to 1400 MW
  - 2008

- **Law No. 40-09 for ONEE**: consolidation, ONE and ONEP
  - 2009

- **Morocco-Algeria**: The second 225kV (200 MW)
  - 2010

- **Morocco-Algeria**: The third 400kV line, exchange capacity 1200 MW
  - 2014

- **Law on regulation and creation of the National Regulatory Agency for Electricity**
  - 2016

- **New reconfiguration and repositioning MASEN and ONEE (Synergy)**
  - 2015

- **Opening the Low Voltage**
  - 2016
Current organization of the electricity sector before RES law

Regulated market

Production
- Import ONEE
- ONEE
- IPP
- Self Producer

ONEE – Single buyer

Transmission

Marketing and Distribution

ONEE – TSO
- Distribution Private utilities (4)
- Distribution Public utilities (7)
- ONEE - Distribution

Customer VHV-HV
- Customers VHV-HV
- Customers MV - LV
- Customers VHV-HV
- Export
Current organization of the electricity sector *After RES Law*

**Regulated market**
- Import ONEE
- ONEE
- IPPs
- MASEN

**Open market**
- Self Producer
- Producer Law 13-09

**ONEE – Single buyer**
- Distribution Private utilities (4)
- Distribution Public utilities (7)
- ONEE - Distribution

**ONEE – TSO**
- Customers VHV-HV
- Customers MV - LV

**Export**
- Customers VHV-HV
- Export

**Complementary electricity**
Achieving 10100 MW of additional capacity in renewable energy between 2016 and 2030:

- **Solar**: 4560 MW
- **Wind**: 4200 MW
- **Hydropower**: 330 MW

Round about US $ 40 billion between 2016 and 2030, with more than US $ 30 billion for renewable energy

Reconfiguring the energy institutional landscape

- MASEN, all current and future renewable energy, with the exception of STEP;
- STEP will be developed and managed by the ONEE;
- Strengthening organic links between ONEE and MASEN.
Opening of the renewable electricity market
Opening of the electricity market
(law 13-09 : Renewable energies)

- Possibility to provide green electricity by the private
- Access rights to national electricity transmission and distribution network (MV, HW et VHV)
- Possibility of direct transmission lines
- Possibility of exporting green electricity

Parc éolien Akhefnir
100 MW
LAW No 58-15 AMENDING LAW No 13-09 RELATING TO RENEWABLE ENERGY

- Increase of the threshold from 12 to 30 MW for hydro-power.
- Possibility of selling the surplus electricity production from renewables source to ONEE or to distribution system operator.
- Opening of the low voltage Renewable energy market.
Opening the medium voltage grid to private investors (decree on access to the national medium voltage electricity network)

- fix the Conditions and modalities of access of electric power generation installations from renewable energy sources to the national grid of medium voltage

- Opening Medium Voltage network in two axes:
  - smooth and gradual opening of the medium voltage power grid (trajectory, envelope);
  - establishment of a transparent, non-discriminatory and stable framework for investors.
Self producer access to the national transmission grid

- Possibility for the large-scale consumers of producing, of electrical energy without limitation of power
- Access rights of self-producers to the national transmission grid,
Objectives of the Law No. 48-15 related to the regulation of the electricity sector and the creation of ANRE
Law No. 48-15 related to the regulation of the electricity sector and the creation of ANRE

Why?

- Accompany the profound changes and the future developments in the electricity sector;
- Increase the attractiveness of the electricity sector for the private investors;
- Ensure competition, transparency and the proper functioning of the free market of electricity;
- Strengthen the integration of Morocco into regional electricity market Euro-Mediterranean.
Objectives of the Law No. 48-15 related to the regulation of the electricity sector and the creation of ANRE

• Fix the principles necessary for the regulation of the electricity sector, in order to guarantee the right of access to the electrical grid.

• Create the National Authority for the Electricity Regulation, to ensure the proper functioning of the free electricity market and regulate the access of auto-producers to the transmission grid.
Guidelines for Law No. 48-15

- The independence of the ANRE
- The financial autonomy of ANRE
- Collegiality of governance within ANRE
- Control by ANRE of access conditions of to grids
- The power of sanction by ANRE of infringements identified.
Independence of the ANRE

**Status:** ANRE is instituted under the status of legal person of public law, endowed with the financial autonomy.

**Financial control:**
- ANRE is not subject to the provisions of Law 69-00

**Accounting control:**
- ANRE's accounts are subject to an annual audit.
- ANRE is subject to control by the Court of Auditors.

**Control of decisions:**
- ANRE's decisions can be subject to action for annulment.
The mean financial resources of the ANRE:

• Proportionate contribution to the sums collected by TSOs and DSOs;

• Budgetary endowments provided by the State, if appropriate.

• Product of pecuniary sanctions imposed by ANRE;

• Miscellaneous income in accordance with legislation and regulations.
Organs and missions of ANRE
Collegiality of governance within ANRE

The Council of the ANRE

10 members appointed for a mandate of 6 years, renewable only once:

- The President of ANRE appointed in accordance with current legislation (ANRE strategic Establishment);
- 3 members appointed by decree;
- 3 members appointed by the President of the Chamber of Representatives;
- 3 members appointed by the President of the Chamber of Advisors.

The committee of dispute settlement

3 members appointed for a mandate of 3 years renewable only once:

- A magistrate appointed by the Supreme Council of Judicial Power, which is acting as Chairman of the committee of dispute settlement.
- two members appointed intuitu personae by the Council of ANRE.
Missions of ANRE

- Approval of the multiannual program of investments in the electrical grid of transmission and interconnections.

- Control and Monitoring of proper functioning of the free market

  Opinion on requests of authorization for the achievement of electricity generation facilities from renewable energy sources and of the transmission direct lines.

- Defining standards and regulations governing the electricity sector:

  Approval of the grid code, quality indicators and codes of conduct.

- Accounting separation of the Manager of the National TSO

  Approval of perimeters, imputation rules and principles proposed by the TSO, in order to implementing the accounting separation.

- Fixing of tariffs of grid utilization VHV, HV and MV and of access to interconnection.

- Settlement of Dispute and sanction toward operators
Thank you for your kind attention