



*Speech by HEDNO's Chairman and CEO Mr. Georgios Ath. Kolias
in the International Conference
on "Smart Grids and Islands of Europe – a new green technological
revolution".*

Minister,

Secretary General,

Chairman of PPC S.A.

Dear Guests

Ladies and Gentlemen,

Good morning.

I would like to thank the DAFNI Network of Sustainable Aegean Islands and the Conference of Peripheral Maritime Regions of Europe (CPMR) for organizing today's conference.

Nowadays the electricity market faces many challenges.

So, we are invited to respond efficiently and dynamically to these challenges.

HEDNO has established its role as a very significant institutional factor in our country's electricity market.

HEDNO is currently one of the main bodies for the implementation of the State's energy policy.

It is a corporation with strong presence and, mainly, with dynamic future that constitutes the new firm pillar of growth for the Greek economy.

It constitutes the "heart" of a market, the development of which defines at a large extent our country's evolution.

HEDNO has specific goals and vision.

Within the elaborated business plan, "Smart Grids", to which the Minister and PPC's Chairman made reference, are placed at the center of its strategy.



Also, this strategy aims at dealing with efficiency **the great challenges in the electricity management of the Non-Interconnected Islands.**

We are developing the procedures for the implementation of relevant projects referring to the establishment of "Smart Grids" in the Non-Interconnected Islands.

The "Smart Grid" is an electricity network which integrates in a smart way all Users that are connected to it, Producers, Suppliers and Customers aiming at the efficient provision of sustainable economic and safe energy using innovative products and services along with intelligent monitoring, control, communications and technologies of automatic recovery so as:

- To facilitate the interconnection and operation of power plants of all technologies.
- To provide Consumers with the possibility to play active part in the optimization of system operation, to provide them with wider information and easier selection of Supplier.
- To reduce significantly the environmental impact of the electricity system.
- To provide electricity with increased reliability and safety.

The recent implementation of the regulatory framework for the Non-Interconnected Islands Code allows immediate and uninterrupted activation of the interested parties:

Not only in the electricity supply of the Islands electricity systems,
but also in electricity generation from conventional plants.

However, the number of particular characteristics in the Non-Interconnected Islands Systems and Market, specifically the wide range of their Systems size compared to the interconnected systems impose the use of smart infrastructure; at this point, it should be noted that the maximum demand per island fluctuates from several kW up to hundreds of MW.

HEDNO, as non-Interconnected Islands Network Operator, takes care for the implementation of smart infrastructure and applies the regulations foreseen by the in force legislative framework referring to the electricity system operation and the electricity market in them.

Within the framework of this role and according to the requirements of the non-Interconnected Islands Code, HEDNO has launched the



development and implementation of smart infrastructure in the non-Interconnected Islands that refer to:

1. Smart Generation, for the increase of RES penetration in the energy balance with safety of supply.
2. Smart Grids, with optimization and operation of Call Centers, optimization and operation of Geographic Information Systems (GIS System), optimization and operation of Remote Supervisory and Network Automation Systems (SCADA/DMS Systems), development and implementation of Energy Control Centers as well as Central Energy Management Systems (EMS/SCADA Systems).
3. Smart Metering with development and implementation of electricity consumers and producers telemetering with the possibility of load remote control (Home Automation) and implementation of electronic billing systems.

At the same time, the innovations integrated into the new Code for the Non-Interconnected Islands refer to:

Firstly: The implementation of an IT system for the non-Interconnected Islands into which the data bases and archives for all the Participants in the Market are kept, that is, Producers, Load Representatives, Power Plants (Thermal and RES), Units of each Power Plant, Meters and the Indications received from them.

The implementation of the IT system for the Non-Interconnected Islands will be realized progressively within the next five-year period as well as the electronic access of all participants.

The Second Innovation introduced with the new Code for the Non-Interconnected Islands is the following:

The Implementation of the Energy Control Centers (ECC in the non-Interconnected islands), which constitute a unified whole of separate systems that operate locally in each electricity system and centrally at the headquarters of the non-Interconnected Islands Network Operator.

The goal of the Energy Control Centers is the supervision of electricity system operation and the management of the generation for each one of them, as well as the optimum load distribution in them, assuring energy supply in each electricity system with the most economic way.

The implementation of the Energy Control Centers in the non-Interconnected Islands is also progressive within a five-year period that will end up to the installation, operation and certification of local Energy Control Centers in each non-Interconnected Island and the Central ECC at



the headquarters of the non-Interconnected Islands Network Operator by February 2019.

At this point, I would like to thank DAFNI Network for its close cooperation with HEDNO in the «ELENA» Programme, which includes the development of Smart Grids in the autonomous electricity systems for the islands of Lesbos, Limnos, Milos, Kythnos and Thira and specifically for the elaboration of studies, issues of call for tenders, as well as the following sub-projects:

Energy Control Centers, Telemetering Systems, electricity-powered vehicles charging stations and Investments in RES from the Network of Sustainable Aegean Islands.

The implementation of the studies and the tender issues for ELENA project are considered completely necessary and urgent, based on the requirements of the code for the Non-Interconnected Islands according to which the local Energy Control Centers in each one of the 32 autonomous electricity systems of the non-Interconnected Islands, as well as the Central ECC at HEDNO's headquarters as Operator of the non-Interconnected Islands, should operate within the next five-year period for the operation of their market through daily rolling Energy Planning.

Concluding, I would like to thank again the organizers of the Conference for their invitation, as well as for the opportunity that I was given to share with you, even in brief, our vision for "Smart Grids" *as well as* for our islands.

I thank you very much.