

Technology Request

Title:

PS - Unified energy network (FP7-ENERGY-2010-1&2) (Ref: 09 GR 49Q1 3FEC)

(Open)

Abstract:

A Greek newly established company is looking for partners in the field of unified energy network, for submitting a proposal under the FP7. The Greek company provides experience and knowledge in a broad range of the relevant aspects of the project such as Smart-Grid, modelling and simulation of power grids and intelligent control based on Multi Agent System. The company is looking mainly for a serious coordinator with ambitious project.

Description:

The project goal is to develop and demonstrate in full-scale a master plan of a general applicable concept for a unified energy network. The research focuses on system integration and grid connection of energy generation, on a new intelligent network and control architectures with increased flexibility, through supply and demand response and on integration of electric power system with other energy systems.

Penetration of renewable energy sources and distributed generation (DG) based on real - time signals , enabling resources to contribute actively to the system balancing and enabling optimized operation and control of the grid. Research focuses on automation, modernization and restructuring of existing energy system and to ensure sustainability in urban environments.

The objectives are to enable predictions to optimise energy production, transport, distribution and consumption using machine learning techniques and intelligent control in monitoring and protecting the energy network. Another objective is the coordinated operation of distributed energy systems and interaction among a large number of components and distribution systems. Both the architecture (infrastructure) of the systems and the requirements of the operational tools to be adapted within the system.

The project will provide EU with valuable solutions for safe operation of future energy grids through optimization and real time demand response technologies and will provide mixed energy concepts in order to reduce energy costs and CO2 emissions. Project's multi - facade design can also provide an energy market definition and control enabling the stakeholders, governments, to reduce risks costs. The project could support realistic conditions where end-users could have active participation through standardization of necessary architectures and interfaces.

The Greek company provides experience and knowledge in a broad range of the relevant aspects of the project such as Smart-Grid, modelling and simulation of power grids and intelligent control based on Multi Agent System. Creation of a multi-dimensional system merged with sub - systems that perform digital energy modelling of production, transformation, distribution and consumption. , a full -scale energy equilibrium validated and tested. Qualitative representation of trends, definitions, formalizations and development of quantitative numeric interface are also offered as well as the experience in power plant engineering.

The company is looking mainly for a serious coordinator with ambitious project. Experience in FP7 desirable. More specific a partner expertise in energy supply- demand business, ICT developers/vendors, Distribution Systems Operators (DSO or TSO - Transmission).

Technical Specifications / Specific technical requirements of the request

Coordinator and partners relevant to the field: Unified energy network, as described in the ENERGY FP7 call.

Other Profile Details

Organisation: National Documentation Centre /
National Hellenic Research
Foundation

Network
Partner: CIP-Hellas

Country: Greece

Entry Date: Fri, November 20, 2009

Validation
Date: Fri, November 20, 2009

Deadline: Thu, June 03, 2010

List of Keywords

Technology

- ✦ Energy Storage and Transport
- ✦ Transmission of electricity
- ✦ Energy production, transmission and conversion

Market

Organisation/Company

Type: Industry
Size: <10

Collaboration Type

- ✦ Joint further development

Comments

- Type of partner sought: The Greek company is looking for a serious leader with ambitious project. Experience in FP7 desirable. More specific a partner expertise in energy supply- demand business, ICT developers/vendors, Distribution Systems Operators DSO or TSO .
- Specific area of activity of the partner: Unified energy network
- Task to be performed by the partner sought: Submit a proposal under the call: FP7-ENERGY-2010-1&2

Targeted Countries

ALL

Associated Thematic Group

- ✦ Intelligent Energy

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