

# TASK XV NEWSLETTER NO 1

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## TASK XV: NETWORK-DRIVEN DSM

Task XV: Network-Driven DSM is an R&D project carried out by of the Demand Side Management Programme of the International Energy Agency. The project involves an international collaboration of Australia, France, Spain and the USA, plus possibly other countries.

### Focussing on Network Constraints

The focus of Task XV is on identifying the most appropriate and cost-effective DSM measures to relieve electricity network constraints. The term 'constraint' is intended to include all types of network problems including capacity limitations, voltage fluctuations, reliability issues, etc.

Such network problems have been linked to the blackouts seen during 2003 in the USA and Europe. They are becoming a significant issue in countries where electricity demand is increasing and network infrastructure ('poles, wires and substations') is ageing. As loads grow and infrastructure reaches the end of its economic life, the potential cost of augmenting electricity networks is increasing exponentially.

### Developing DSM Measures

Task XV will identify and develop a wide range of DSM measures which can be used to relieve network constraints, whether the constraints are time related (eg occurring at times of the network system peak) or location-related (eg associated with particular lines or substations) or both.

Such network-driven DSM measures are often more cost-effective and may also have lower environmental impacts than network augmentation (i.e. building poles, wires and substations).

Task XV covers a broad range of DSM measures, including:

- distributed generation, including standby generation and cogeneration;
- energy efficiency;
- fuel substitution;

- load management, including interruptible loads, direct load control, and demand response;
- power factor correction;
- pricing initiatives, including time of use and demand-based tariffs.

### Gaining Benefits from Participating

Participating in Task XV will enable countries and organisations to:

- understand the advantages and disadvantages of network-driven DSM measures as alternatives to network augmentation;
- gain information about network-driven DSM measures currently in use in other countries and about the relative effectiveness of these measures;
- understand the factors which lead to a network-driven DSM measure being effective;
- participate in further developing network-driven DSM measures so that they will be successful in cost-effectively relieving network constraints;
- identify modifications which can be made to existing network planning processes to incorporate network-driven DSM measures as alternatives to network augmentation;
- understand the interaction between network-driven DSM and the operation of competitive electricity markets;
- participate in developing business models, rules and procedures to achieve the successful implementation of network-DSM measures under different electricity market structures and regulatory regimes.

### More Information

Detailed information about the content of the Work Plan can be found in the Task XV Prospectus at:

[www.efa.com.au/Library/ProspectusNetworkDSM\\_int.pdf](http://www.efa.com.au/Library/ProspectusNetworkDSM_int.pdf)



## TASK XV PROGRESS

### Project Initiation

At the bi-annual meeting of the IEA DSM Programme Executive Committee held in April, the ExCo:

- approved the initiation of the international R&D project on Network-Driven DSM;
- nominated Dr David Crossley from Australia as the Operating Agent (ie Project Director) for the project;
- specified that the project should now be referred to as Task XV of the IEA DSM Programme.

### Participants

Currently, four countries have committed to participate in Task XV:

- Australia;
- France;
- Spain;
- USA.

Task XV is still open for participation by other countries and organisations. Please contact the Operating Agent, David Crossley, at [crossley@efa.com.au](mailto:crossley@efa.com.au) if you want to participate.

## NEXT STEPS

### National Participation Plans

The Executive Secretary for the IEA DSM Programme, Anne Bengtson, will shortly write to the Executive Committee members of countries participating in Task XV requesting the submission of National Participation Plans.

A National Participation Plan (NPP) describes how a country will participate in a Task. Through preparation of the NPP, each country defines how it will participate, agrees to this participation, and begins the steps to guarantee that the necessary resources (human and financial) will be available when needed. NPPs are to be submitted two months prior to the intended start of a Task.

### Task XV Annexe

The Task XV Operating Agent, David Crossley will prepare the Annexe for the Task. The Annexe is the legal agreement between the participating countries about the objectives of the Task and how these objectives will be carried out. The Annexe will be prepared from the Task XV Work Plan contained in the Prospectus.

David Crossley will circulate the draft Annexe to the Executive Committee members of the participating countries for approval before it is sent to the IEA legal office for verification and acceptance.

### EXCO Meeting

At the next meeting of the IEA DSM Programme Executive Committee in October, the ExCo will be asked to declare Task XV to be “in force”.

### Task XV Time Schedule

It is proposed to formally commence Task XV in October 2004, once the ExCo declares the Task to be “in force”. Since Task XV is scheduled to be an 18 month project, it will be completed by March 2006.

The Task XV Prospectus contains a detailed timetable which specifies when each of the elements of the Task XV Work Plan will be completed.

### First Task XV Experts Meeting

The first Task XV Experts Meeting will be held in Atlanta, Georgia, USA during the week of the IEA DSM Programme Executive Committee meeting

The dates for the Experts Meeting are Monday and Tuesday 11th and 12th October 2004. The Operating Agent will provide more details about the agenda and venue for the meeting closer to the date.

In the meantime, Task XV country Experts should note the dates and location for the Experts Meeting.

## TASK XIII: DEMAND RESPONSE RESOURCES

Task XV is one of two new related R&D projects undertaken by the IEA DSM Programme. The other is Task XIII: Demand Response Resources.

Demand response resources comprise changes in electricity consumption levels and patterns, either requested of customers by an upstream electricity supplier or undertaken directly by end-use customers in response to the prices they pay, or are offered, for electricity.

Task XIII is developing the technology, economic and implementation tools needed to rapidly implement demand response to address growing electricity peak demand issues which can create reliability and price volatility issues in the participating countries.

Further information about Task XIII can be found at: [www.demandresponseresources.com](http://www.demandresponseresources.com)

# Australian Supplement

## AUSTRALIAN IEA CONSORTIUM

Australian participation in both Task XV and Task XIII is being undertaken through the Australian IEA Consortium (AIEAC). AIEAC was established in mid-2004 to enable Australian organisations to participate in multi-national R&D projects carried out under the auspices of International Energy Agency Implementing Agreements.

The AIEAC website is at:  
[www.efa.com.au/aieac.html](http://www.efa.com.au/aieac.html)

## International Energy Agency

The International Energy Agency (IEA) is an intergovernmental body committed to advancing security of energy supply, economic growth and environmental sustainability through energy policy co-operation.

The IEA provides a framework for international collaborative energy research, development and demonstration under more than 40 Implementing Agreements. These Agreements enable experts from different countries to work collectively and share results, which are usually published. The IEA DSM Programme is one of these Implementing Agreements.

## IEA Tasks

In IEA terminology, multi-national R&D projects are called 'Tasks'. Tasks are undertaken collaboratively under the management of an 'Operating Agent' (Project Director). The Operating Agent is responsible for overall management of the Task, including deliverables, milestones, schedule, budget and communications.

The actual research work for a Task is carried out by a combination of the Operating Agent and a group of country Experts, depending on the nature of the work to be carried out. Each country which is participating in a Task nominates one person as its country Expert. Each Expert is responsible for carrying out any research work within his/her country which is required for the Task.

## Operation of AIEAC

AIEAC provides a vehicle whereby its member organisations share the costs of participating in IEA Tasks. AIEAC members can therefore participate in international collaborative energy research at moderate cost.

AIEAC members include companies, industry associations, government agencies and academic institutions. Organisations become members of AIEAC by paying a financial contribution, the level of which varies depends on the particular Task(s) the member wishes to participate in.

Financial contributions to AIEAC raise sufficient funds to pay for the costs involved in Australia participating in each Task. In addition, AIEAC supports travel by one Australian Expert per Task to attend Experts meetings.

All the Experts for a Task meet regularly to review and assess the progress of the work completed by the Operating Agent and by the group of Experts. Experts meetings are usually held between two and four times a year on a rotational basis in one of the countries participating in the Task including, on occasions, in Australia.

## NEXT STEPS

### Australian Participants

At present nine Australian organisations have committed to participating in Task XV.

Task XV is still open for participation by other Australian organisations. Please contact the Operating Agent, David Crossley, at [crossley@efa.com.au](mailto:crossley@efa.com.au) if you want to participate.

### Financial Contributions

Financial contributions to the cost of Task XV from Australian participants are set at \$10,000 a year (plus GST) for a period of two years (ie 2004/05 and 2005/06). Invoices will be sent shortly to those participants who have not yet paid.

### Meeting of Australian Participants

A meeting of Australian participants will be held in mid-August to organise how the Australian participation will be carried out and to decide on an Australian Expert. The Operating Agent will provide more details about the agenda and venue for the meeting closer to the date.

### Circulation of Task XV Annexe

The Operating Agent will circulate the draft Task XV Annexe to all Australian participants for comment.

### Task XV Australian Prospectus

An Australian version of the Task XV Prospectus is at: [www.efa.com.au/Library/ProspectusNetworkDSM\\_au.pdf](http://www.efa.com.au/Library/ProspectusNetworkDSM_au.pdf)

