Task XV
Third Experts Meeting

David Crossley
Operating Agent Task XV

17 and 18 October 2005
Red Eléctrica de España
Madrid, Spain

Agenda First Session

MONDAY 17 OCTOBER

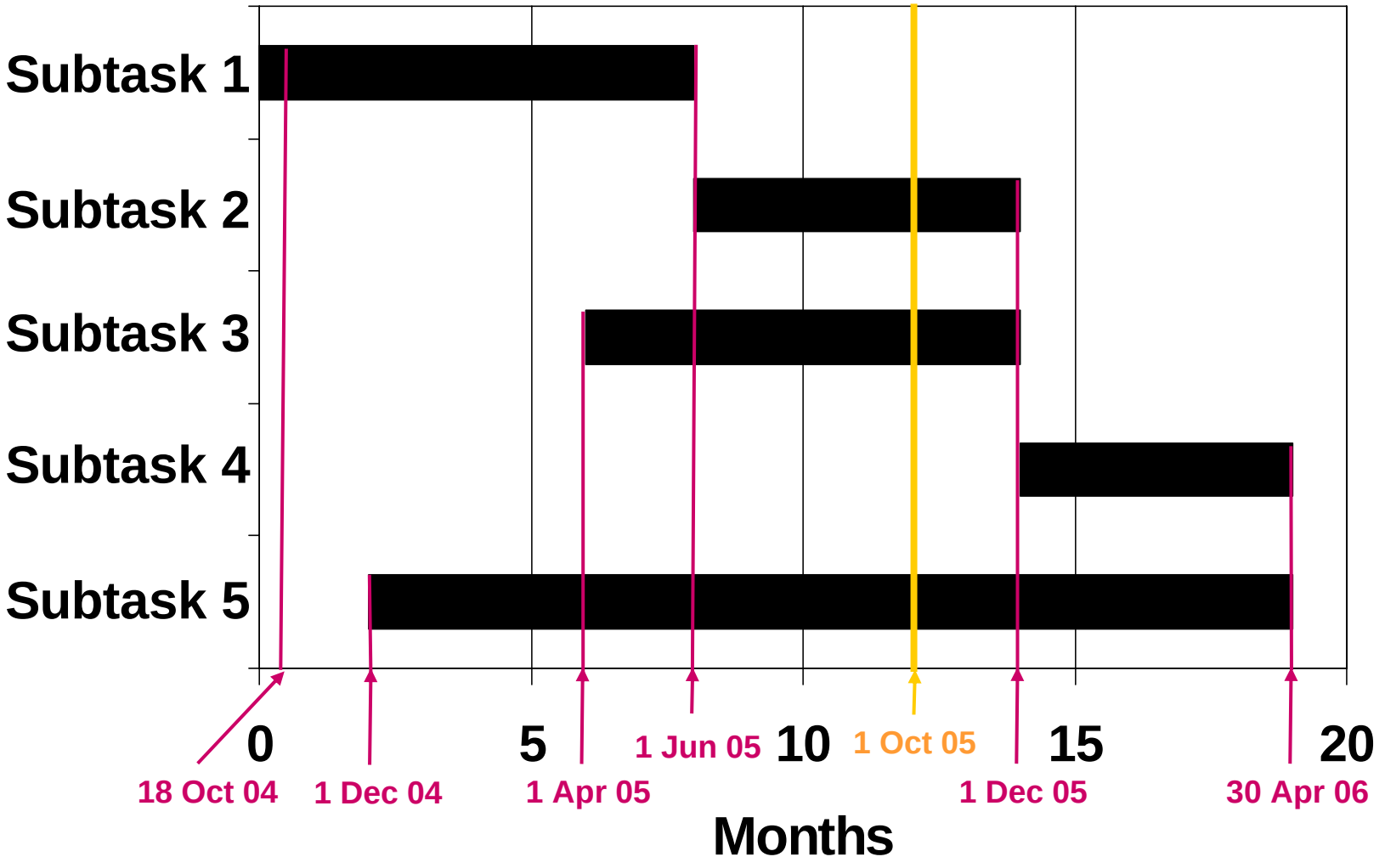
8.00 am	Welcome and local arrangements	Beatriz Gómez
8.15 am	Progress with the Task XV Work Plan as outlined in the Prospectus and the Legal Annexe	David Crossley
8.45 am	Comments on progress with the Work Plan	Task Experts
9.00 am	Introduction to Task XV Research Report No 1: Worldwide Survey of Network-driven DSM Projects	David Crossley
9.30 am	Refreshment break	
10.00 am	Australian case studies	Australian Task Expert
10.45 am	French case studies	French Task Experts
12.30 pm	Lunch	

Progress with the Task XV Work Plan

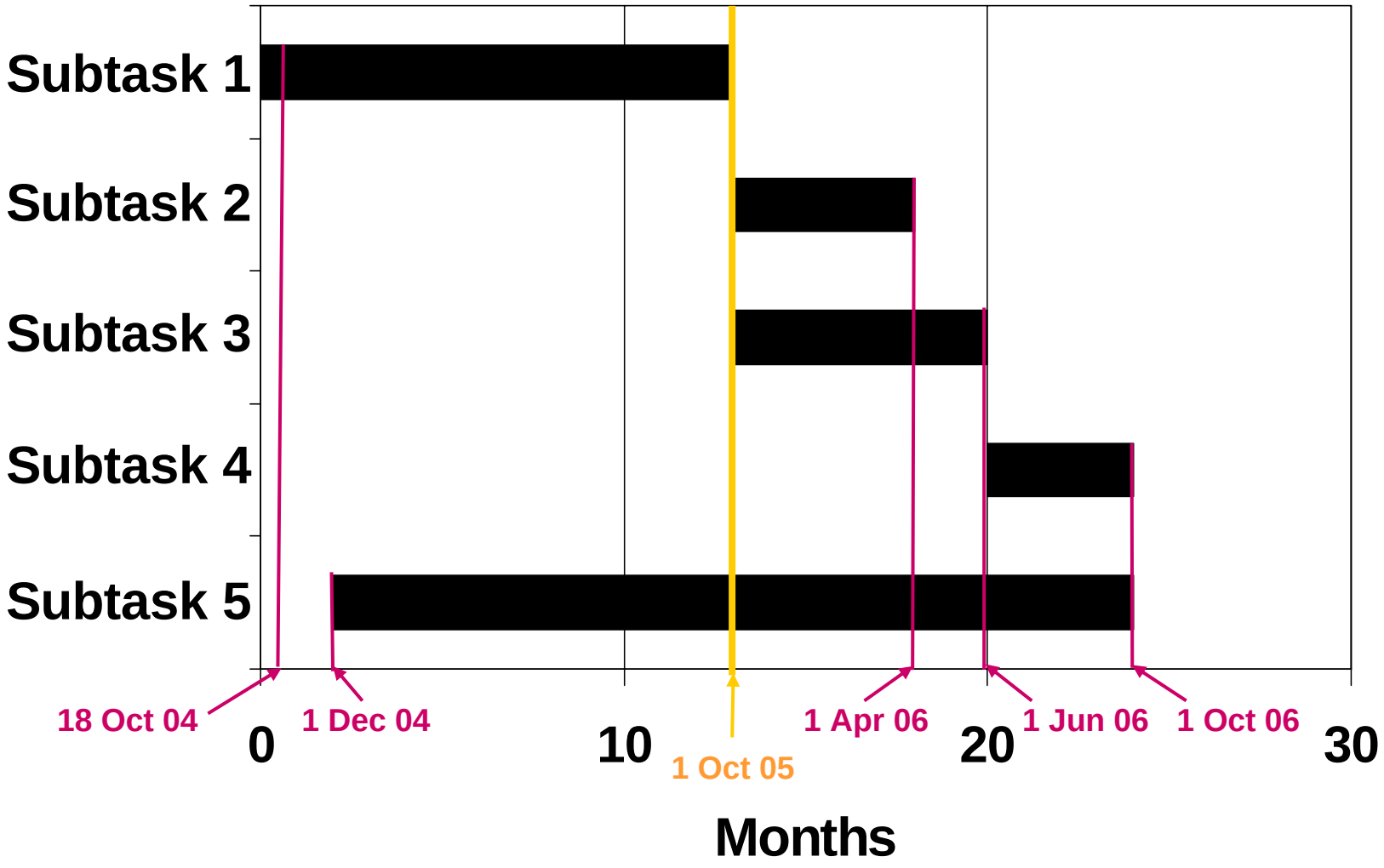
Work Plan

- Subtask 1: Worldwide Survey of Network-Driven DSM Activities
- Subtask 2: Assessment and Development of Network-Driven DSM Measures
- Subtask 3: Incorporation of DSM Measures into Network Planning
- Subtask 4: Evaluation and Acquisition of Network-Driven DSM Resources
- Subtask 5: Communication of Information About Network-Driven DSM

Task XV Timetable (Current)



Task XV Timetable (Proposed)



Task XV Research Report No 1 Worldwide Survey of Network-driven DSM Projects

Subtask 1 Survey of DSM Projects

Objective

- To identify a wide range of DSM measures which can be used to relieve electricity network constraints and/or provide network operational services

Deliverable

- A report listing and summarising network-driven DSM projects implemented around the world

Subtask 1 Survey of DSM Projects

- Activity 1-1: Network-Driven DSM Projects in Participating Countries
- Activity 1-2: Network-Driven DSM Projects in Other Countries
- Activity 1-3: Identification of Network-Driven DSM Measures

Classification of DM Activities

- DG - distributed generation, including standby generation and cogeneration
- EE - energy efficiency
- FS - fuel substitution
- IP - integrated DSM projects
- LM - load management, including load shifting, direct load control, interruptibility and market-driven demand response
- PC - power factor correction
- PI - pricing initiatives, including time of use and demand-based tariffs

DSM Projects in the Database

	DG	EE	FS	IP	LM	PC	PI	Total
Australia	2	1	1	4	3	1	1	13
France				1			2	3
Spain					4		2	6
United States	2	2		1	9		1	15
Non-participating Countries		2			3		1	6
Total	4	5	1	6	19	1	7	43

Distributed Generation (1)

Network Application

- Can reduce overall demand (when operated continuously)
- Can reduce peak demand (when operated intermittently)
- Can be deployed strategically in geographical areas where network constraints occur
- Can be installed in particular localities to reduce demand on a specific network element
- May also be used to:
  - reduce network losses
  - improve utilisation (load factor) of existing transmission and generation assets
  - provide voltage support on long rural lines; and
  - provide automatic frequency response (with appropriate technology fitted to larger distributed generation plant)

Distributed Generation (2)

Survey Examples

- DG01 Nelson Bay Embedded Generation – Australia
- DG02 Bromelton Embedded Generation – Australia
- DG03 Kerman Photovoltaic Grid-Support Project – USA
- DG04 Chicago Energy Reliability and Capacity Account – USA

Energy Efficiency (1)

Network Application

- Can reduce overall demand (when applied generally to all loads in a sector)
- May reduce peak demand (when applied specifically to peak loads)
- Can be deployed strategically in geographical areas where network constraints occur
- May be implemented in particular localities to reduce demand on a specific network element
- Difficult to target accurately enough to provide network operational services

Energy Efficiency (2)

Survey Examples

- EE01 Efficient Lighting Project DSM Pilot – Poland
- EE02 Oncor Standard Offer Program for Residential and Commercial Energy Efficiency – USA
- EE03 Oncor Air Conditioning Distributor Market Transformation Program – USA
- EE04 Espanola Power Savers Project – Canada
- EE05 Katoomba DSM Program – Australia

Fuel Substitution (1)

Network Application

- Can reduce overall demand (when applied generally to all loads in a sector)
- May reduce peak demand (when applied specifically to peak loads)
- Can be deployed strategically in geographical areas where network constraints occur
- May be implemented in particular localities to reduce demand on a specific network element
- Cannot be used to provide network operational services

Fuel Substitution (2)

Survey Example

- FS01 Tahmoor Fuel Substitution Project – Australia

Integrated DSM Projects (1)

Network Application

- Can reduce overall demand (when applied generally to all loads in a sector)
- Can reduce peak demand (when applied specifically to peak loads)
- Can be deployed strategically in geographical areas where network constraints occur
- Can be implemented in particular localities to reduce demand on a specific network element
- Depending on the specific DSM measures employed, may also be used to provide network operational services

Integrated DSM Projects (2)

Survey Examples

- IP01 Blacktown DSM Program – Australia
- IP02 Castle Hill DSM Program – Australia
- IP03 Parramatta DSM Program – Australia
- IP04 Olympic Peninsula Non-wires Solutions Pilot Projects and GridWise Demonstration – USA
- IP05 Brookvale / DeeWhy DSM Program – Australia
- IP06 Maine-et-Loire DSM Project – France

Load Management (1)

Network Application

- Not used to reduce overall demand
- Can reduce peak demand (usually applied specifically to peak loads)
- Can be deployed strategically in geographical areas where network constraints occur at the system peak
- Can be implemented in particular localities to reduce peak demand on a specific network element
- Load management measures with short response times can also be used to provide network operational services

Load Management (2)

- There are four different types of load management measures:
  - load shifting technologies
  - direct load control
  - interruptibility arrangements
  - market-driven demand response

Load Management (3)

	LS	DLC	INT	DR	Total
Australia	2	1			3
France					
Spain			4		4
United States	2	3	1	3	9
Non-participating Countries	2	1			3
Total	6	5	5	3	19

Load Management (4)

Survey Examples: Load Shifting

- LM02 Winter Peak Demand Reduction Scheme – Ireland
- LM10 Binda Bigga DSM Project – Australia
- LM11 Eskom DSM Profitable Partnership Programme – South Africa
- LM16 TU Electric Thermal Cool Storage Program – USA
- LM17 Mad River Valley Project – USA
- LM19 Baulkham Hills Substation Deferral Project – Australia

Load Management (5)

Survey Examples: Direct Load Control

- LM01 Ethos Project Trial of Multimedia Energy Management Systems – Wales, UK
- LM05 Sydney CBD Demand Curtailment Project – Australia
- LM06 LIPAedge Direct Load Control Program – USA
- LM08 Sacramento Peak Corps – USA
- LM09 PEF Direct Load Control and Standby Generator Programs – USA

Load Management (6)

Survey Examples: Interruptibility

- LM12 Load Interruption Contract – Spain
- LM13 Flexible Load Interruption Contract – Spain
- LM14 Interruptibility Contract for Cogenerators – Spain
- LM15 Active / Reactive Power Exchange – Spain
- LM18 California Energy Cooperatives – USA

Load Management (7)

Survey Examples: Demand Response

- LM03 ISO New England Demand Response Programs – USA
- LM04 New York ISO Demand Response Programs – USA
- LM07 PJM Load Response Programs – USA

Power Factor Correction (1)

Network Application

- Can reduce overall demand (when applied generally to all loads in a sector)
- Can reduce peak demand (when applied specifically to peak loads)
- Can be deployed strategically in geographical areas where network constraints occur
- Can be implemented in particular localities to reduce demand on a specific network element

Power Factor Correction (2)

Survey Example

- PF01 Marayong Power Factor Correction Program - Australia

Pricing Initiatives (1)

Network Application

- Used to change customers' energy-using behaviour to reduce demand at the time of the system peak
- Typically applied to particular customer classes across a whole electrical system and are therefore usually not targeted to geographical areas where network constraints occur
- Some work is now being carried out on congestion pricing in which electricity prices are increased in constrained network areas

Pricing Initiatives (2)

Survey Examples

- PI01 California Critical Peak Pricing Tariff for Large Customers – USA
- PI02 Loire Time of Use Tariff Program – France
- PI03 Queanbeyan Critical Peak Pricing Trial – Australia
- PI04 Hourly Demand Tariff – Spain
- PI05 End User Flexibility by Efficient Use of Information and Communication Technologies – Norway
- PI06 Tempo Electricity Tariff – France
- PI07 Reduced Access to Network Tariff - Spain

Conclusion (1)

- The survey showed that network-driven DSM measures can effectively:
  - achieve load reductions on electricity networks that can be targeted to relieve specific network constraints; and
  - provide a range of network operational services, achieving peak load reductions with various response times for network operational support

Conclusion (2)

- The survey also showed that all types of demand DSM measures can be used to relieve network constraints and/or provide network operational services
- However, whether a particular DSM measures is appropriate and/or cost effective in a particular situation will depend on:
  - the specific nature of the network problem being addressed; and
  - the availability and relative costs of demand-side resources in that situation

Australian Case Studies

DSM Projects in the Database

	DG	EE	FS	IP	LM	PC	PI	Total
Australia	2	1	1	4	3	1	1	13
France				1			2	3
Spain					4		2	6
United States	2	2		1	9		1	15
Non-participating Countries		2			3		1	6
Total	4	5	1	6	19	1	7	43

DG01 Nelson Bay Embedded Generation

- Project type: Distributed generation
- Location: Nelson Bay, about 200 km north of Sydney, Australia
- Driver: To reduce loading on long 33kV lines which were about to exceed capacity
- Project target: Network region
- Market segment: Non-customer related
- Project description: The local electricity distributor installed 6 MVA of diesel generation obtained from a leasing company The generation is operated whenever the total demand on the 33kV system approaches the limit in order to keep the net demand below the load shedding threshold. The generators will remain in place for about two years until a new transmission line is constructed and then will be removed.
- Results: 6 MW reduction in peak load

DG02 Bromelton Embedded Generation

- Project type: Distributed generation
- Location: Bromelton, Queensland, Australia
- Driver: To reduce loading on a 110kV transmission line until a second one can be built in about two years time
- Project target: Network region
- Market segment: Non-customer related
- Project description: The local electricity distributor will install fifteen 1.825 MVA diesel generators on vacant land adjacent to Bromelton bulk supply substation.
- Results: N/A

EE05 Katoomba DSM Program

- Project type: Energy efficiency
- Location: Katoomba, Blue Mountains, about 100 kilometres west of Sydney, Australia
- Driver: To defer further augmentation of the local distribution network
- Project target: Network region
- Market segment: Several thousand residential customers
- Project description: The program used one full-time advocate of energy efficiency measures to provide advice to homebuilders and developers. The program used publicity on radio, educational programs and the creation of a register of energy efficiency service providers who could install or sell items such as insulation, double glazed windows, alternative fuel appliances, high efficiency light fittings and heat pumps. The local electricity distributor paid for the provision of information about energy efficiency to householder but did not subsidise the cost of energy efficiency devices.
- Results: N/A

FS01 Tahmoor Fuel Substitution Project

- Project type: Fuel substitution
- Location: Tahmoor, about 70 km south of Sydney, Australia
- Driver: To defer augmentation of the distribution network by controlling growth in the winter evening peak demand and combating a low load factor
- Project target: Network region
- Market segment: 100 residential customers
- Project description: The local electricity distributor promoted the use of bottled gas by residential customers for cooking and space heating. The distributor arranged the installation of bottled gas and appliances and provided subsidies for the installation of bottled gas and for each bottled gas appliance.
- Results: N/A

IP01 Blacktown DSM Program

- Project type: Integrated DSM project
- Location: Blacktown and Seven Hills areas of western Sydney, Australia
- Driver: To defer the upgrade of a zone substation
- Project target: Network region
- Market segment: 15 commercial and small industrial customers
- Project description: Customers of the local electricity distributor who have opportunities to reduce peak demand are offered a free energy audit in return for signing a Memorandum of Understanding. Financial incentives are paid for each initiative implemented, based on the verified demand reduction achieved.
- Results: 2MW reduction in peak load

IP02 Castle Hill DSM Program

- Project type: Integrated DSM project
- Location: Castle Hill, Sydney, Australia
- Driver: To defer the requirement to build a new substation
- Project target: Network region
- Market segment: 6 commercial and small industrial customers
- Project description: The program operates in the commercial sector, particularly retailers in a large shopping centre. The program is targeting interruptible loads, the use of existing standby generators, the installation of high efficiency air conditioning (and the upgrading of existing air conditioning systems), and the installation of efficient lighting and power factor correction equipment in new and replacement applications. The contracts are performance based, with payment on verification of demand reductions.
- Results: 1.35 MVA reduction in peak load

IP03 Parramatta DSM Program

- Project type: Integrated DSM project
- Location: Parramatta, western Sydney, Australia
- Driver: To defer the capital expenditure required to build a new zone substation
- Project target: Network region
- Market segment: 6 commercial and small industrial customers
- Project description: The local electricity distributor funded and conducted a major survey to identify and establish the opportunities for DSM in the Parramatta central business district. The distributor made offers to building owners/managers for the implementation of appropriate DSM initiatives. The DSM options considered included the installation of power factor correction equipment and the use of existing back-up generators to allow interruption of mains electricity without loss of amenity to specific customers in time of system stress. .
- Results: 3 MVA reduction in peak load

IP05 Brookvale / DeeWhy DSM Program

- Project type: Integrated DSM project
- Location: Brookvale / Dee Why - Northern Sydney suburbs, Australia
- Driver: To defer capital investment in the local sub-transmission infrastructure
- Project target: Network region
- Market segment: Commercial and small and large industrial customers
- Project description: The local electricity distributor is implementing DSM measures targeting the commercial and industrial sectors, including: installation (or repair) of low voltage power factor correction equipment at customers' premises; the use of a privately-owned standby generator to export energy to the network during peak periods; and a Standard Offer for demand reductions achieved by customers or third party aggregators through energy efficiency measures undertaken at customers' premises.
- Results: 1.85 MVA reduction in peak load

LM05 Sydney CBD Demand Curtailment Project

- Project type: Load management
- Location: Sydney central business district, Australia
- Driver: To test the capability to dispatch peak load curtailment in the Sydney CBD through remote control of major plant in a portfolio of buildings
- Project target: Network region
- Market segment: 4 commercial and small industrial customers
- Project description: The project established links between a central load control point and the various building management systems. These links enabled direct load control of the building management systems to reduce electricity demand in the CBD on an at-call basis for short periods (up to 6 hours). Demand reductions were rotated across a portfolio of several buildings during the call period, with each building contributing to delivering the total required demand reduction.
- Results: 0.4 MW reduction in peak load

LM10 Binda Bigga DSM Project

- Project type: Load management
- Location: The rural communities of Binda and Bigga near Crookwell in New South Wales, Australia
- Driver: To reduce voltage fluctuations and avoid extensive reconductoring of the line supplying the area
- Project target: Network region
- Market segment: 100 residential customers
- Project description: The local electricity distributor provided incentives to encourage residential customers to undertake a range of load shifting, energy efficiency and fuel substitution measures.
- Results: 0.2 MW reduction in peak load

LM19 Baulkham Hills Substation Deferral Project

- Project type: Load management
- Location: Baulkham Hills, Sydney, Australia
- Driver: To defer the construction of a zone substation
- Project target: Network region
- Market segment: 1 large industrial customer
- Project description: The local electricity distributor established an agreement with one major industrial customer who uses large furnaces and puts a substantial peak demand on the network. Under the agreement, the customer is given 24 hours notice to shed load during the peak period on the following day. The customer is able to achieve this shift by speeding up production prior to the event and then slowing it down from its average rate during the peak.
- Results: 4 MW reduction in peak load

PC01 Marayong Power Factor Correction Program

- Project type: Power factor correction
- Location: Marayong, western Sydney, Australia
- Driver: To reduce the load on particular zone substation and thereby defer the capital expenditure required to strengthen a specific feeder
- Project target: Network region
- Market segment: Large industrial customers
- Project description: The local electricity distributor identified low power factor loads in the area served by the substation and proceeded to install power factor correction equipment in the low voltage network outside customers' premises (not on the customer side of the meter). The distributor paid for the equipment and the installation. This program was implemented without the involvement of customers.
- Results: N/A

PI03 Queanbeyan Critical Peak Pricing Trial

- Project type: Pricing initiative
- Location: Queanbeyan and Jerrabomberra, New South Wales, Australia
- Driver: To investigate the feasibility of promoting peak load reductions by residential sector customers to relieve distribution network constraints
- Project target: Network region
- Market segment: 200 residential customers
- Project description: The local electricity retailer installed interval meters and in-home information display units in participants' dwellings The display unit provides customers with specific information about the amount of electricity they are using, and how much it is costing. Critical peak periods are called by the retailer when the load on the local network is reaching maximum capacity or when high price events occur in the competitive wholesale electricity market. A beeping sounds from the display unit alerts customers to the start of a critical peak period.
- Results: In the first critical peak period called on 15 March 2005, a load reduction of 30% was achieved

Agenda Second Session

MONDAY 17 OCTOBER (continued)

12.30 pm	Spanish case studies	Spanish Task Expert
1.15 pm	United States case studies	United States Task Expert
2.00 pm	Refreshment break	
2.30 pm	Discussion on conclusions from the case studies	Task Experts
4.00 pm	Finish for the day	

Case Studies from Non-participating Countries

DSM Projects in the Database

	DG	EE	FS	IP	LM	PC	PI	Total
Australia	2	1	1	4	3	1	1	13
France				1			2	3
Spain					4		2	6
United States	2	2		1	9		1	15
Non-participating Countries		2			3		1	6
Total	4	5	1	6	19	1	7	43

EE01 Efficient Lighting Project DSM Pilot

- Project type: Energy efficiency
- Location: Three regional cities in Poland
- Driver: To reduce greenhouse gas emissions by accelerating the introduction of compact fluorescent lamps (CFLs) in Poland
- Project target: Network region
- Market segment: 8500 residential customers
- Project description: Large scale promotion of CFLs through a subsidy/coupon system in geographic areas where the existing electricity network capacity was inadequate to meet existing loads or soon would be inadequate to meet future load growth
- Results: 2.43 MW overall load reduction

EE04 Espanola Power Savers Project

- Project type: Energy efficiency
- Location: Espanola - a small township in northern Canada with a population of 6000
- Driver: To extract the maximum possible reduction in electricity consumption from a geographically concentrated area
- Project target: Network region
- Market segment: Residential, commercial and small industrial customers
- Project description: The project implemented concentrated marketing in both the residential and commercial sectors, carrying out comprehensive energy audits and inspections, and providing incentives for the installation of energy efficiency measures.
- Results: N/A

LM01 Trial of Multimedia Management Systems

- Project type: Load management
- Location: Rural area of south Wales (UK)
- Driver: To test whether it was possible to achieve peak load reductions on an electricity distribution network by using multi-media energy management systems in the residential sector
- Project target: Network element
- Market segment: 100 residential customers
- Project description: The energy management systems optimised the charging period of domestic storage appliances, including space heaters and water heaters, in response to cost information broadcast by the local electricity utility. The combination of a dynamic tariff/cost structure and the energy management systems enabled the utility to influence when energy was used to charge storage appliances and also had the ability to prevent charging completely in any specified period.
- Results: 25% reduction in peak load

LM02 Winter Peak Demand Reduction Scheme

- Project type: Load management
- Location: Whole network in the Republic of Ireland
- Driver: To reduce winter peak load on the electricity network
- Project target: Whole network
- Market segment: 186 large industrial/ commercial customers
- Project description: Large commercial and industrial customers voluntarily committed to reducing consumption between 5 and 7 pm every business day from November to February. This reduction was achieved through reducing energy use or utilising on-site generation. Customers received a payment for reliably delivering this committed reduction.
- Results: 80 MW reduction in peak load

LM11 DSM Profitable Partnership Programme

- Project type: Load management
- Location: Whole network in South Africa
- Driver: To shift electricity consumption to off-peak periods in order to reduce peak loads
- Project target: Whole network
- Market segment: Commercial and industrial customers
- Project description: The monopoly electricity utility offers financial assistance through the DSM Profitable Partnership Programme to entities that are serious about efficient use of electricity and the resulting financial savings. Both upgrades to existing buildings and the incorporation of efficient systems in new buildings are targeted. The utility funds 100% of all costs for viable load management projects. Customers are not required to contribute towards the capital expenditure on projects.
- Results: N/A

PI05 End User Flexibility through Use of ICT

- Project type: Pricing initiative
- Location: Two distribution network areas in Norway
- Driver: To investigate manual and automatic demand response to prices in the day ahead market
- Project target: Network region
- Market segment: 10,984 mainly residential customers
- Project description: The project implemented two way communication between the local electricity distributor and customers, including automated meter reading with hourly readings. Customers were offered a range of different tariff structures and an opportunity for direct load control of their water heaters by the local electricity distributor
- Results: 3.2 MW reduction in peak load

Agenda Third Session

TUESDAY 18 OCTOBER

8.00 am	Discussion of Subtask 2: Assessment and Development of Network-Driven DSM Measures	All
9.30 am	Refreshment break	
10.00 am	Discussion of Subtask 3: Incorporation of DSM Measures into Network Planning	All
11.30 am	Lunch	
12.30 pm	Where to from here?	All
2.00 pm	Finish of the Experts meeting	

Subtask 2 Network-Driven DSM Measures

Objective

- To further develop the identified network-driven DSM measures so that they will be successful in cost effectively achieving network-related objectives

Deliverable

- A report listing and summarising successful network-driven DSM measures and the specific network problems they address

Subtask 2 Network-Driven DSM Measures

- Activity 2-1: Value Proposition for Network-Driven DSM
- Activity 2-2: Effectiveness of Network-Driven DSM Measures
- Activity 2-3: Further Development of Network-Driven DSM Measures

Effectiveness of DSM Measures

Network Constraints (1)

- Network constraints have a time-related dimension because they may be:
  - peak related – occurring strongly at the system peak and lasting seconds, minutes or a couple of hours; or
  - non-peak related – less strongly related to the system peak, occurring generally across the electrical load curve and lasting several hours, days, months, years or indefinitely

Network Constraints (2)

- Network constraints also have a geographically-related dimension because they can occur:
  - generally across the network in a particular geographical area; or
  - specifically associated with particular network elements such as certain lines or substations

Network Constraints (3)

- To be effective in relieving network constraints, DSM activities must address both:
  - time-related and
  - geographically-related

  dimensions of network constraints

Network Operational Services

- Critical requirement of network operational services is that they must be available:
  - for precisely the required time period
  - in sufficient quantity to achieve the operational objective (can be a forecasting problem for the system operator)

Effective DSM Measures

- DSM resource must be:
  - available over the required time period
  - persistent over the required time period
  - appropriately geographically located
  - cost-effective compared with supply-side or 'build' options
- Who is the appropriate/effective implementor of the DSM measure(s)

Subtask 3 DSM and Network Planning

Objective

- To investigate how existing network planning processes can be modified to incorporate the development and operation of DSM measures over the medium and long term

Deliverable

- A report on ways in which network planning processes can be modified to incorporate DSM measures as alternatives to network augmentation

Subtask 3 DSM and Network Planning

- Activity 3-1: Interaction between Network-Driven DSM, Electricity Markets and Regulatory Regimes
- Activity 3-2: Identification of Network Planning Processes
- Activity 3-3: Options for Modifying Network Planning Processes

Incorporating DSM Measures into Network Planning

NSW Code of Practice for Distributors (1)

- In the State of New South Wales, Australia, the Code of Practice *Demand Management for Electricity Distributors* was developed by an industry working group managed by the State Government's Department of Energy
- The purpose of this *Code* is to prescribe a methodology for the market-based development of options for supporting the electricity network (including DSM, embedded generation and storage options) and their evaluation at the same time and in the same manner as investments in network augmentation (ie building "poles and wires")
- Options may be identified by electricity customers or third parties, or by the electricity distributor itself
- Option evaluation is carried out by means of a competitive process

NSW Code of Practice for Distributors (2)

- The planning process specified in the *Code* comprises the following elements:
  - a process for informing the market by disclosing appropriate information about the current and future state of the electricity network
  - a process for fully and consistently specifying any constraints in the network
  - a process for fairly and consistently evaluating proposals to overcome these constraints
- The *Code* contains detailed protocols specifying how each of these processes should be carried out

NSW Code of Practice for Distributors (3)

- Each electricity distributor is required publish an annual *Electricity System Development Review* and to develop generic support options for the electricity network
- The distributor is then required to disclose information relating to specific forecast network constraints; and to consult with customers and other interested parties in relation to these constraints
- If appropriate (as defined by a "Reasonableness Test") the distributor is required to issue a Request for Proposals (RFP) for network support, including detailed information on the support required
- Organisations which could provide network support then make proposals in response to the RFP

NSW Code of Practice for Distributors (4)

- Typical proposals may include:
  - the owner of a generator in an office building or factory offering to run the generator during times of system peak on the electricity network
  - an energy service company offering to implement energy efficiency measures at customers' premises in the location where network support is required
  - an owner of a large manufacturing facility offering to reschedule their production process so as to be able to turn off their equipment during peak times
  - a proponent offering a distributed generation solution

NSW Code of Practice for Distributors (5)

- Each of the proposals includes a price which the proponent requires to be able to provide the offered network support
- The distributor evaluates the proposals and then determines a preferred option
- The distributor and the proponent then negotiate about implementing the proponent's proposal