



MEMORANDUM

To: IEA DSM Task XIII Participants
From: Pete Scarpelli, Task XIII OA Team
Date: February 11, 2005
RE: February 2, 2005 San Francisco Experts Workshop Meeting Minutes

The third Experts Meeting was held in San Francisco on February 2-3, 2005. California's Demand Response Research Center (DRRC) hosted the meeting with physical meeting space provided by Pacific Gas & Electric (PG&E). We are extremely grateful for their contributions. We would also like to take a brief moment to thank the DRRC for hosting a joint demand response conference following our working meeting and PG&E for giving us a tour of their Energy Center research and outreach efforts.

All pre-meeting and meeting materials can be located on the project portal (www.demandresponseresources.com). You can also link to the DRRC's website from our project portal to acquire copies of the presentations from the Joint Task XIII/DRRC meeting.

Tuesday Evening

On the evening before the meeting, attendees that were not too jet lagged from their long journey met for a pre-meeting dinner at the "Thirsty Bear", a tapas restaurant near the hotel. If the representatives from Spain were able to join us for the meeting and for this dinner, I'm sure they would have told us that the tapas we had in Valencia was much better. However, those of us with less sophisticated tastes were pleased.

Day 1

Pete Scarpelli called the meeting to order at 9:00 AM Wednesday, February 2, 2005. The following people were present:

	Name	Country
1	Julian Turecek	Australia
2	Magnus Hindsberger	Denmark
3	Casper Kofod	Denmark
4	Mikael Togeby	Denmark
5	Seppo Kärkkäinen	Finland

6	Walter Grattieri	Italy
7	Satoshi Ueno	Japan
8	Toru Matsumura	Japan
9	Jan Griffioen	Netherlands
10	Dr. René (I.G) Kamphuis	Netherlands
11	Gerrit Jan Schaeffer	Netherlands
12	Arno Sijben	Netherlands IEA DSM Vice Chair
13	Ove S. Grande	Norway
14	Inge Harald Vognild	Norway
15	Margareta Bergstrom	Sweden
16	Peter Fritz	Sweden
17	Dan Delurey	USA
18	Renee Guild	USA
19	Dave Kathen	USA
20	Chuck Goldman	USA
21	Corey Mayers	USA PG&E – Meeting Host
22	Bob Kinert	USA PG&E Meeting Host
23	Mary Ann Piette	USA DRRC- Meeting Host
24	Pete Scarpelli	USA OA Team
25	Randy Gunn	USA OA Team
26	Dr. Dan Violette	USA OA Team

* Representatives from Spain and Korea were unable to join us.

Scarpelli informed everyone that Ross Malme injured his Achilles tendon over the weekend and the problem became worse over the last couple days. Malme was in sever pain Wednesday morning and regrettably concluded that he needed to have it looked at by his doctor as soon as possible. Scarpelli conveyed Malme’s desire to attend the meeting and his sincere regret for not being able to attend.

[Corollary: Malme saw a couple different doctors over the next few days and they recommended that he have surgery to repair the tendon. The doctors further informed him that he might not be able to walk for a couple months after the surgery so that the tendon could properly heal. Given that Task XIII is at a critical juncture, Malme has elected to defer the surgery for the foreseeable future. Malme’s dedication to his work is undeniable.]

Scarpelli then thanked Mary Ann Piette, Director of California’s Demand Response Research Center (DRRC), for hosting our meeting and further thanked Corey Mayers and Bob Kinert of PG&E for providing the meeting room. Ms. Piette then welcomed everyone to San Francisco and provided a brief introduction to the DRRC. Ms. Piette explained that the DRRC is coordinating multiple demand response research efforts throughout

During the brief Q&A session at the end of the presentation, a couple experts noted that that we have sent many emails and documents over the last few months and it has been difficult to keep track of everything. Scarpelli acknowledge this concern and commented that he heard a similar concern from Australia during a teleconference a couple days before the meeting. Scarpelli indicated that the OA Team will attempt to more clearly identify each document and email with an explanation about where it fits within the project so it is easier on all participants.

After a brief, but well deserved break, Scarpelli gave a presentation on Task 2: Market Characterization (see EW Feb 05 Market Characterization Tools). This presentation focused on the Country Comparison Report, Task XIII Guidebook updates, and the Communication Toolkit.

- **Country Comparison Report:** One of the deliverables for Task 2 is to produce a summary report on project participant market structures and examples of current DR efforts. This report is intended to provide a brief overview and introduction for those that are not familiar with general structure of other project participants. During the ensuing discussion, a few people indicated that they may offer some suggested updates for their country and Sweden, Denmark, Finland, and Norway suggested that they be aggregated together. The OA Team will discuss these issues with the nations during the upcoming teleconferences and issue a final report in the near future.
- **Project Tool Updates:** Prior to the meeting, the OA Team released some updates to the Project Guidebook and the portal research library. The Project Guidebook will get fatter as the project progresses and more information is developed. The additional sections will be published as they are produced. In addition to the recent updates, we anticipate releasing new information for Task 3, 4, 5, & 6 in the next couple months.

We also indicated that the portal research library continues to grow as we receive new information. The research library is intended to provide all project participants with background materials and access to studies and papers from other participating countries. We continue to desire any information that you may be willing and able to share. [Corollary: We would like to thank Inge Harald Vognild of Norway for sending a few papers on their Reserve Option Market shortly after the San Francisco meeting. You can locate this information in the research library.]

- **Communication Toolkit:** In early January, the OA Team announced the delivery of the Communication Kit (see Task XIII Communication Tool Kit and Task XIII Communication Tool Kit Forms). This document was provided to assist the Country Experts with developing a communication roadmap inside their country. The OA Team believes that reaching out to the right people and organizations at the right time throughout the project will help the project achieve the vision noted above. It will also help the Country Experts with Task 8 (see above).

There was a brief discussion after the presentation. Some people questioned what they would do with the Communication Toolkit and how it fit into the project. Scarpelli explained that its use would become more apparent as we begin to prepare for Task 8 presentations over the next year and that the OA Team put it together as part of its overall project management effort to help achieve the project vision. The OA Team will

discuss the utilization of the Communication Toolkit with each country during the upcoming teleconferences.

The meeting was running a little ahead of schedule, so we decided to have Randy Gunn, OA Team – Summit Blue Consulting, begin his discussion on Task 3: Market Potential (see EW Feb 05 DR Potential Studies). Task 3 has three specific deliverables: DR market potential benchmarks, consumer survey templates for detailed DR potential studies, and a description of DR market potential modeling techniques. The market potential benchmarks are intended to provide Country Experts with a simplified method of estimating the market potential in their country. The survey forms are intended to provide tools that a Country Expert could use to get more detailed level data from actual in-country consumers. The modeling technique review will describe some statistical estimation methods for assessing market potential.

Mr. Gunn explained that he recently completed a survey of about 40 North American utilities to gather data that could be used to create market potential benchmarks. A draft report on his efforts was published in advance of the meeting (see Market Potential Summary Report 1-26-05 and Market Potential Report Appendix 1-25-05). The report provides an assessment of some of the most successful DR efforts. This information is intended to provide a way to quickly assess the DR market potential in their market based on the success others have achieved.

There were three key issues discussed:

- **Need international input:** The initial research effort was, by design, North American (USA and Canada). We started with North American data because (a) it was relatively easy to acquire, (b) gave us an idea what information we could actually get, and (c) allowed us to create the basic structure and fill it in as we obtain new data. However, as we said during the previous project teleconferences, we always intended to seek input from all participating countries. We will discuss how to do this with each country during the upcoming teleconferences.
- **Need method for translating the benchmarks:** It was noted that in order for the benchmarks to be useful, users need a way to be translate the information across various market demographics and structures. Based on this feedback, we will modify the tool accordingly.
- **Consider synergies with the DR Product Database:** It was noted that the DR Product Database that is being developed in the Operational Issues Workgroup has some similarity to the Market Potential Benchmarks. The former contains information on product structures and the latter contains information on product achievements. It was agreed that both elements are needed, but we might be able to develop a more user friendly tool by consolidating the databases. Based on this feedback, we will attempt to do so.

There was a break for lunch in the middle of Mr. Gunn's presentation.

At the conclusion of Gunn's presentation we took a brief break. Scarpelli then led a discussion about the Operational Issues Workgroup (see EW Feb 05 Operational Issues). This discussion centered on the Demand Response Product Database and market barriers. We intended to have a discussion about the "unique operating

characteristics of DR” (see DR Tables Jan 28 2005), but we did not have time to do so. We will take up this discussion with Operational Issue Workgroup members in the near future.

Some key items of our discussion were:

- **Work area review:** We restated the work areas and reviewed the current schedule.
- **DR Product Database:** The current version of the database was distributed with the pre-meeting materials (see DR Programs September 15 2004). We had a discussion about the database organization and some of the reference characteristics. We requested all that all countries review the database and are prepared to discuss its structure and a methodology for including information from their respective countries during the upcoming teleconferences.
- **Market barriers:** We distributed a summary of the market barrier issues each country provided in advance of the meeting (see DR Market Barrier Summary Jan 31 2005). During our discussion about the definition of a market barrier, some thought that we should not use the one proposed from the European Union because it was not the definition economists would use. In light of this feedback we will acquire a new definition. We then had a discussion about the best way to present the information collected. There seemed general agreement that collecting the “raw” information about the challenges incurred in various markets would provide some foundational information for others to evaluate. This seemed preferable over the development of policy recommendations for regulators because people thought that the policy recommendation may be market specific, but the “raw” experiences would give them a place to start formulating recommendations.

Mr. Sijben reminded us that the IEA DSM Programme has implemented several other tasks and there may be things we can incorporate from those previous efforts. The OA Team will go back and review the information and see what we may be able to use.

We called the first day to a close at 5:00 PM. We reconvened for what was described as a typical Californian style dinner at Lulu’s Restaurant.

Day 2

Scarpelli called the meeting to order at 9:00 AM on September 21, 2004.

We started the day with presentations from three project team members:

- **EU-DEEP - Seppo Kärkkäinen:** Seppo is working on a related project called EU-DEEP (see Finland DR Karkkainen). This project is focusing on developing a database of consumer demand response capabilities. The database will be organized by standard industry code. (NOTE: We looked for a similar database at the beginning of Task XIII, but we were not able to locate anything like this). Unfortunately, we were informed that the information developed from the project remain proprietary.

- **DR Efforts in the USA- Dan Delurey:** Delurey provided an overview of DR efforts throughout the United States. He focused on why people are interested in DR and what some of the challenges have been to make it happen (see USA DRCC Presentation at SF IEA 5-2-03).
- **CRISP 2005 – Dr. René Kamphuis:** In a related DR project, ECN is investigating how ICT based distributed intelligence can be exploited for the management of power networks with distributed energy resources (see Netherlands CRISP2005 IEA DRR February).

We would like to thank all speakers for their presentations. Presentations like these help everyone better understand what is happening in other markets. All project participants have said that this is one of the most important reasons for their participation in Task XIII. We will continue to try and share similar information through meeting presentations, the project newsletter, and the project research library.

Dr. Dan Violette then gave a presentation describing the status of Task 4 DR Valuation (see EW Feb 05 DR Valuation).

The presentation started with a review of the work areas:

1. **Work Area 1: Benefit/Cost Framework** -- Develop the Benefit-Cost Framework that appropriately supports the economic case for DRR.
2. **Work Area 2: Valuation and Planning** -- Develop "approaches" (not specific models) to incorporate DRR in resource portfolio
3. **Work Area 3: Ex-Post Evaluation of DRR** – Discuss approaches for evaluating and verifying the benefits and costs of specific DRR put in the field.

The next section of the discussion looked at the Identification of Benefits and Costs related to (a) Market-Wide Perspectives and (b) Private Entity Perspectives. A key challenge that was identified is that we must make sure we are not double counting benefits in our methodologies.

Dr. Violette then reviewed several cost benefit methodologies that have been used by others.

Finally, Dr. Violette proposed a process for assessing DR value. In order to assess the long-term impact that DR can have on energy markets, the proposal included the use of market models that have the ability to dimension uncertainty. He explained that we could use tools that are commercially available with some modifications. He also indicated that a few firms, including our Denmark team members, have agreed to support the effort.

The ultimate goal is to develop guidebooks that would teach the project members how to implement a similar process for their market. To do this, the guidebook would include examples based on a generic market configuration with a few basic DR products included in the market to assess the impact it has on the market.

At the conclusion of the presentation, we had a lengthy and detailed discussion about the plan. We polled the room and heard thoughts from each country about the proposed strategy. There seemed to be general agreement that the proposed methodology should yield a reasonable estimate of forward-looking DR value. A few key issues were:

- **“How do I use the results”:** Some people questioned how the sample runs would be used in their country. We clarified that Task XIII does not have the budget to reach results for each individual country (or market). The project was designed to provide tools that people could implement. The examples in the guidebook are not intended to be actual results. They are only intended to provide instructions for how to implement.
- **Implementation costs:** Some people asked us to provide indication of what it would cost for someone to implement the methodology.
- **Market actors:** It was noted by a few people that we should not forget about articulating how the various market actors would assess impact of DR to them.
- **Energy efficiency:** Energy efficiency efforts are likely to be promoted in various markets. Therefore, some felt that the methodology should include a way to incorporate these efforts or the value may be overstated.

At the end of the discussion, it was recommended that the Economic Workgroup review the example markets and example DR products to validate the details prior to the implementation.

The valuation presentation and subsequent discussion took significantly longer than we originally expected. Since it appeared that everyone was fully engaged in the discussion and we were not rehashing the same things, Scarpelli decided to allow things to continue. Unfortunately, this meant that we were unable to discuss the State of the Technology Practice Workgroup. Scarpelli committed to reviewing this information with each country during the upcoming teleconferences.

Prior to closing the meeting, we had a quick discussion on a few administrative issues:

- **Newsletter:** People indicated that we should continue to produce the project newsletter provided that we have quality content, but it did not need to be as polished as it is. However, when Scarpelli indicated that some people to share what Task XIII is doing with regulators and other market actors also use the newsletter, having a polished product was appropriate.
- **Monthly teleconferences:** Since our Milan Expert Meeting, we have hosted monthly project teleconferences. Unfortunately, the meetings were not as effective as we had hoped. On the other hand, the group thought that having monthly teleconferences with each individual country would be more effective. This will commence in the next few weeks.
- **Next Experts Meetings:** Sweden has offered to host the next Experts Meeting in June. The meeting is tentatively scheduled for June 13-14 in Stockholm. We also said that the subsequent Expert Meeting will be held in Australia sometime during the first couple weeks in November.

Scarpelli called the meeting to a close at 5:00 PM.

Action Items:

1. OA Team will work with Sweden to finalize plans for the next Experts Meeting.
2. OA Team will schedule teleconferences with each country over the next few weeks.
3. OA Team will draft a discussion outline for Task 8. We will discuss this with each country during the teleconference.
4. OA Team will review several "homework" requests with the country experts during the upcoming teleconference.