

## CONSULTATION RESPONSE TEMPLATE

<i>NAME OF RESPONDENT</i>	Activation Energy Ltd
<i>CONTACT DETAILS</i>	<a href="mailto:info@activationenergy.ie">info@activationenergy.ie</a> <a href="http://www.aedsu.com">www.aedsu.com</a> 014428801
<i>TYPE OF COMPANY</i>	Energy Service Company
<i>INTEREST IN DSM</i>	Development of a Demand Side Unit in the SEM

## SECTION 2

QUESTION 1: Do you agree with our characterisation of the four types of benefits that demand side management can provide?

ANSWER:

The benefits outlined refer to system benefits, not benefits to the participants. Key benefits of DSM can come to the individual electricity users who take part in it, and so improve their competitiveness and financial viability.

QUESTION 2: Are there other cost savings which you believe demand side management can deliver?

ANSWER:

Again, the diagram you present for this section does not include user.

We also believe that a reduction in overall system peak demand and total usage can reduce the operational and regulatory costs, providing a benefit to all users. (i.e. reduction in CER and SEMO costs)

QUESTION 3: Are there additional studies and reports (to those listed in **Error! Reference source not found.**) which you are aware of and believe we should review?

ANSWER:

QUESTION 4: What other insights do you have from your experience of demand side management adopted

internationally?

ANSWER:

QUESTION 5: Are you aware of other quantitative findings from international experience which you believe are important for us to capture and consider?

ANSWER:

QUESTION 6: Do you agree with our identified drivers of future value for demand side response/management? Are there any additional drivers we should consider?

ANSWER:

While competitiveness is mentioned in passing, it is largely ignored in this section. The effect of “giving money back” to Irish users in the form of DSM incentives versus “buying imports” in the form of generation and peaking plant requires further study.

We consider the issues identified in 2.5.5 to be the opposite of what is highlighted. Demand response is most likely to occur in areas with high demand, and so a response from these areas has added value, not reduced.

We feel that this study identifies a badly run DSM system (such as footnote 12), and holds it up as an example as what would happen here. Having highlighted this potential issue, it can easily be avoided. Where scheduling or other issues are identified, they can be changed easily.

### SECTION 3

QUESTION 7: Are there any other aspects of current demand side activity in Ireland which should be captured?

ANSWER:

The term “activity” here suggests that something is there is some participation, where in most cases, there is not.

The reference to DSUs receiving energy payments from the SEM is inaccurate.

Thermal storage, such as ice banks, could be included

CHP and other electrical base load generation could be included

Back-up generation is also a response to the risk of shedding on the system, and so could be included

QUESTION 8: Do you agree with our high level assessment of the potential for demand side management in Ireland by 2020?

ANSWER:

As this document is titled “Vision”, we would encourage more ambitious targets. More intelligent appliances may pave the way to far greater potential DSM.

We believe that a greater focus on cooling and air con should be included in this section as the growth in this type of demand is significant.

We believe there is far more distributed generation available than estimated here. The majority of large industrial sites have back-up generation available. Also the majority of large commercial buildings have back-up generation available. Hotels alone (though only making up a small part of the generators available) could meet the target set for distributed generation in this document.

## SECTION 4

QUESTION 9: Do you agree with our definition of each individual demand side measure?

ANSWER:

QUESTION 10: Is our description of the current policy baseline for each demand side measure accurate and complete. If there are omissions please point them out.

ANSWER:

QUESTION 11: Do you agree with our categorisation of different types of “market issue” and typical remedies for each?

ANSWER:

Where rules occur which prevent participation in a market, it is not a “market failure”, it is a regulatory failure.

We believe greater emphasis needs to be given to the “Split incentives”, as we feel this is a strong barrier in the Irish market

QUESTION 12: Do you agree with our identified barriers and enablers for each of the specific demand side measures we have identified?

ANSWER:

Smart Meters and Automation

We feel that Smart Meters present a particularly interesting opportunity for DSM. The roll out of DSM information to users linked directly to their current usage is exciting, and when linked to the current uptake of new technologies such as the smart phones, internet applications and smart appliances will present a great opportunity for real participation.

It should be noted however that the existing smart meters installed on large sites, are under-utilised. We believe that the data from these meters (their USP) should be made available to customers more readily. As discussed below, we feel the first steps in DSM should be removing barriers such as this, before implementing new things such as installing more meters (though we are in favour of their roll out).

We therefore propose that data gathered by smart meters be shared as quickly as possible to allow the market to maximise the potential of the participation.

We also propose that third parties be allowed to take part in the roll out of automation to provide customers with the variety of services they will want in differing circumstances.

Furthermore we propose that the focus of these opportunities should be to allow third parties to provide services (such as display, control etc) based on the data, rather than the system operators to control the data.

Finally we feel smart meters should be facilitated, rather than imposed. When rolling out broadband, a test was not carried out on 5000 random computer users. Instead broadband became available and the users who were most interested took it up. We propose following a similar model with smart meters. Facilitate them, and let the most interested users be the first users.

#### Industrial/Commercial DSM

We agree that the lack of day ahead pricing is unhelpful. Provision of firm prices (perhaps to registered participants) would be fair considering the benefits to the system provided by such participants.

Considering the other barriers (listed below) we do not consider the 4MW de-minimus level to be a real barrier. Though it should be changed, we feel that if the outcome of this consultation is to only make this change, it will be pointless.

The statement regarding energy payments to DSUs is an error. As the TSC rules stand, DSUs only receive capacity payments.

As the rules in relation to WPDRS allow participants to be part of a DSU (though have zero availability during WPDRS hours), its existence is a benefit to DSUs, not a barrier.

Other barriers are

- Time for their response to dispatch is set by the grid code, which was written with large manned generators in mind, not small demand sites. In some ways they are better, in some ways worse.
- There is no understanding of the requirements of for demand reduction in sites with varying loads. If they are about to ramp up a machine, will they be credited if they agree to delay the demand?
- For sites who register as a DSU, no clearly defined test strategy exists
- *DSUs are required to register as a TSSU (supplier) meaning paying for an extra unit in the market, a*

*supply license and provide credit cover. This effectively prevents third party aggregation, and also discourages most sites from participating. This restriction does not exist for ANY other unit type in the market, demonstrating existing policy AGAINST DSM in Ireland.*

- The EPA put limits on use of back-up generators. Government should request these limits be removed for DSU participants.
- A further barrier relates to the unavailability of meter data from the main electricity meter to the user. Users could be provided with access to the meter data (something they have the right to) on a real time basis with little cost to the system
- DSUs are not currently bound to the Grid Code.
- DSUs are not currently bound to the Bidding Code of Practice

#### Aggregated Generator Units

The requirement for the installation of a retail quality meter with SCADA installed by ESB Networks is the real barrier here. The cost and delays involved is a significant problem, where real-time monitoring equipment coupled with site meters would be sufficient to provide the information required.

As mentioned in your document, users must be allowed control of their own generators during times of supply faults without charges is critical.

Barriers relating to the export of electricity are significant, particularly relating to timescales involved in the gate process.

As above EPA restrictions are significant.

QUESTION 13: Do you agree with our identified market issues for each specific demand side measure and our proposed remedies to address these?

ANSWER:

As mentioned above, we don't see market issues, only regulatory barriers. Until regulatory barriers are removed, the viability of these measures in the market cannot be verified.

QUESTION 14: What are your views on the likelihood and effectiveness of the identified policy options addressing the specified market issue and delivering the desired change?

ANSWER:

As per Q12

QUESTION 15: Are there any unintended undesirable consequences that any of the options might create elsewhere?

ANSWER:

## SECTION 5

QUESTION 16: Do you agree with our identified specific demand side measures and our assessment of the different types of benefits each demand side measure provides?

ANSWER:

Fundamentally we disagree with the idea of the authors of this document attempting to outline all options and opportunities. If restrictions are removed, the market can act to encourage the take-up of DSM among the various user types. The focus should not be on government intervention to implement DSM, rather the removal of barriers existing which prevent DSM, allowing the market to discover the best solutions.

QUESTION 17: Are there any additional demand side measures that we should individually identify and assess? If so, what type of benefit(s) is it felt they provide?

ANSWER:

QUESTION 18: Have we identified all of the relevant criteria for assessing the individual and comparative merits of the demand side measures?

ANSWER:

QUESTION 19: What are your views about our approach to high level assessment of different demand side options?

ANSWER:

As discussed throughout, we propose a focus on the removal of barriers to DSM, rather than the development of incentives. Required Government Actions such as "Industry Awareness Programme" suggest that it these measures are allowed currently, when they are generally prevented by the rules.

QUESTION 20: Do you agree with our assessment of each demand side measure against each of the identified factors?

ANSWER:

QUESTION 21: Do you agree with our overall assessment of the relative merits of the different demand side options?

ANSWER:

QUESTION 22: Do you have any comments on our high level assessment of the benefits of different demand side measures?

ANSWER:

We propose that a superior methodology to this vision is to follow the following steps

- Establish the benefits of DSM and the case for proceeding
- Establish the barriers, and the requirements to remove them. Generally speaking, removing barriers is a low cost action
- Where no barriers exist, extra incentives may be considered

## SECTION 6

QUESTION 23: Do you agree with our assessment of the relative priorities of different demand side options in developing a 2020 Demand Side Vision?

ANSWER:

As above, we believe that the priorities at all times should be to remove barriers rather than provide incentives. The creation of incentives is likely to encourage one area of DSM, while preventing the development of other solutions which may be more financially beneficial.

QUESTION 24: What alternative views do you have on relative (merits and) priorities?

QUESTION 25: Do you agree with our proposed high level 2020 Demand Side Vision as described above?

ANSWER:

As this document aims to create a "Vision" we believe that the high level vision proposed is too conservative. We would instead propose the identification of the maximum possible to achieve (say 100% self sufficiency of electricity provision for Ireland due to DSM) and then identifying how close to such a target could be achieved.

Furthermore we feel that this document does not allow for technical developments which are likely over the next

10 years. If a strong financial incentive is in place for customers to take part in DSM, they are likely to purchase equipment which will maximize their participation (such as smart appliances or ice banks). As smarter equipment is now coming on the market, a strong penetration should be included in this vision.

QUESTION 26: What alternative vision would you put forward?

ANSWER:

As per 25

QUESTION 27: Do you agree with our proposed policy pathways for implementation of the identified different policy options for realising our proposed 2020 Demand Side Vision?

ANSWER:

Over the past 18 months Activation Energy has had a lot of time working with the electricity market attempting to facilitate small changes to allow our entry. We have found it quite challenging to change.

We therefore believe that considering this document proposes significant changes, the system for making changes in the electricity rules be reviewed. As it stands it is not an efficient system.

Furthermore the system does not have an organization which will sponsor these changes. If change is prioritized, it would require an organization to take on the workload of proposing them and having them implemented.

Finally, if DSM were to become a significant part of the market and system, it would require representation on the various committees (TSC, GCRG etc) which recommend changes to the system. As we believe that these groups represent a challenge to change, we would prefer to see their power reduced, but if this is not going to happen, representation would be required.

QUESTION 28: What alternative policy pathways would you propose based on your previous comments and responses?

ANSWER:

We therefore propose the development of a DSM project manager within the RAs who will identify the changes required, prepare the code alteration, and champion the modifications. Following these changes, we believe the market should be allowed to function to implement DSM where financially appropriate.

## SECTION 7

QUESTION 29: Do you have any additional view or comments you feel are important/useful for us in (a) establishing a Demand Side Vision for 2020; (b) identifying associated policy development and (c) determining policy pathways?



ANSWER:

Activation Energy would like to make the following comments

- We feel that this document ignores the significant benefits (and rights) of the participating customer
- We feel that there are significant barriers to DSM. Removal of these should be the primary objective of work to promote DSM
- We propose a far more ambition vision
- We propose that the market be allowed to implement DSM
- We believe that the existing system for changes to the electricity system presents a challenge for development in this area
- Furthermore the system does not have an organization which will sponsor these changes. If change is prioritized, it would require an organization to take on the workload of proposing them and having them implemented.

QUESTION 30: Are there any final comments industry stakeholders wish to make about this consultation and the proposed next steps in the consultation process?

ANSWER: