These answers relate to the proposed real-time pricing proposal and were provided to Contact Energy in response to questions submitted during the consultation.

Response to Contact queries regarding our proposal for real-time pricing

The Authority's responses to Contact Energy's queries received by email on 6 September 2017 are set out in the blue boxes below.

Date: 22/9/2017

Questions

- Participation
  - Confirm existing DD scheme requires participant to forecast (and bid) all load downstream of meter?

Yes, DD purchaser must bid all load for the DCLS. However, the specific load device(s) assigned to the DCLS are up to the purchaser as part of the application under Schedule 13.8—they may separate these into DCLS and non-DCLS using different meters. In part, this requirement avoids gaming, where a bid could be dispatched down but the load stays on and is 'swapped' to being metered elsewhere. Bidding all load for the DCLS limits the potential for such gaming/'dishonesty'.

  - Confirm existing DD bids must be positive (ie positive load)? And therefore scheme doesn't work for a meter on a genset or battery circuit?

Yes, DD must bid absolute consumption volumes, which are inherently non-negative values. In contrast, injection technically constitutes generation. However, using a genset or storage behind the meter as the specific technical means to limit (net) load is of course an entirely legitimate way to control a DCLS. (Note, the genset or storage could not be used for both purposes simultaneously.)

  - How could dispatch-lite work for generation and batteries – homeowner doesn't want to forecast/bid whole house load

A dispatch-lite DCLS still has to be dispatchable, and this means bidding absolute consumption volume (as noted above). Individual homeowners might be able to do this, though it seems more likely some form of aggregation would be used. Any embedded/distributed generation injection would receive the spot price at the relevant GXP (paid to the relevant trader), so this may be a better fit. A major benefit of RTP is the improved price certainty for the homeowner in their consumption (and generation) decisions.

Further, dispatch-lite isn't really intended for small-scale generation injecting directly. But the Authority is keen to encourage such technology in general, where efficient, so we can look at options to facilitate this if there are gaps in current arrangements.

    - Could gen/battery bid simply be positive generation rather than load reduction? (see table below)

The battery/generator example could be a dispatch-lite DCLS if behind the same meter as the load. Again, the battery/generator output could control the dispatchable net load at the meter in response to a dispatch notification. The bid quantity is net load.

- Could this work for battery/gen which is also used for export rather than just load reduction? (see table below)

This would be standard embedded/distributed generation—if it's injecting directly it's not dispatchable demand.

- Would only direct market participants/purchasers be able to participate in dispatch-lite? (like current DD scheme)

We are evaluating introducing a load aggregator participant type for dispatchable demand, separate to RTP (project A8 on the Authority's 2017/18 work programme). If introduced, this would also apply to dispatch-lite. Of course, the purchaser could opt for a contracted relationship with an agent to act on their behalf, but today that includes clearing and reconciliation.

- Metering/compliance requirements for dispatch-lite
  - What does "less onerous" compliance obligations mean?

Essentially the ability to say 'no' to a dispatch notification without breaching the Code, as would be the case with a dispatch instruction (noting that doing so must be relatively rare). A dispatch-lite DCLS will also not need a revenue meter specifically to participate: constrained on and off payments do not apply to dispatch-lite, so there is no need for this information in order to calculate it.

- Slides say "no need for real-time telemetry" – what does this mean?

There would be no obligation for the dispatch-light DCLS to provide real-time SCADA information to the system operator. However, the system operator may require this for specific DCLS in some circumstances under Schedule 13.8, clause 3 (noting the same applies for full dispatchable demand today).

- Participants would be "monitored" to ensure compliance with dispatch notifications – how?

Our intent is as part of standard market monitoring practices, although we have not yet developed this aspect in detail. The system operator's processes should also be able to directly record instances of 'rejected' notifications, depending on how they are implemented (ie, through rebidding or via dispatch notification acknowledgements).

- Assume no need for certified meter like DD?

Correct, a separate revenue meter is not required for a dispatch-lite DCLS because constrained on and off payments do not apply.

- Still need to submit adjusted half-hour metering information to reconciliation manager?

Yes, although this would be for the relevant meter.

- Would dispatch-lite purchases [read: purchasers] need to be certified like DD? And undertake audits?

There may be current certification and audit requirements for dispatchable load purchasers that would not be relevant for dispatch-lite. We are keen for your feedback. We may consult further on these aspects as part of finalising the design, if we decide to retain the overall dispatch-lite proposal.

- Incentives
  - Could con-on, con-off payable if dispatch-lite complies with dispatch notifications, three strikes policy work?

The current proposal is dispatch-lite would not be eligible for constrained on and off payments. This 'three strikes' suggestion may have merit, although a revenue meter would now be needed, making dispatch-lite more onerous than our proposal.

bid whole site load

offer	
9	100000
10	300

time	price	load	cost
04:30	80	10	400
05:00	80	10	400
05:30	500	9	2250
06:00	500	9	2250
06:30	80	10	400
07:00	80	10	400
07:30	80	10	400
08:00	80	10	400

bid battery/generator only

offer		
gen	-1	300
load	taken from reconciliation	

time	price	load	gen	total	cost
04:30	80	10	0	10	400
05:00	80	10	0	10	400
05:30	500	10	-1	9	2250
06:00	500	10	-1	9	2250
06:30	80	10	0	10	400
07:00	80	10	0	10	400
07:30	80	10	0	10	400
08:00	80	10	0	10	400

bid battery/generator only and with export

offer		
gen	-1	300
load	taken from reconciliation	

time	price	load	gen	total	cost
04:30	80	0.5	0	0.5	20
05:00	80	0.5	0	0.5	20
05:30	500	0.5	-1	-0.5	-125
06:00	500	0.5	-1	-0.5	-125
06:30	80	0.5	0	0.5	20
07:00	80	0.5	0	0.5	20
07:30	80	0.5	0	0.5	20
08:00	80	0.5	0	0.5	20