Demand Side Response – Autonomous Round table discussion

Introduction to discussion session on DSR SFC

ENTSO-E public consultation workshop on Demand Connection Code (DCC)

Brussels 9th August

entsoe

Reliable Sustainable Connected

Content

Introduction to topic

1. What types of DSR services are we focused on?
2. Who are the likely users of these services, and who benefits?
3. What is capability being asked for?
4. Are their needs reducing or growing?
5. What types of demand are likely to be suitable
6. How is this envisaged to be used?
7. Will this be specified in this code?
8. Why is this capability and operation proposed as becoming mandatory?

Introduction to DSR SFC - Autonomous (i)

1. What types of DSR services are we focused on?
   - Demand being moved in time based on deviation in system frequency
2. Who are the likely users for these services, and who benefits?
   - TSOs are users to maintain system frequency
   - All users benefit from optimised balancing services costs, in what is expected to be a rapidly expanding market and increased security of supply
3. What is the capability the NC DCC is asking for?
   - Autonomous controlled factory/installer fitted control to advance/defer demand temperature controlled devices proportional to deviation in system frequency
4. Are the needs for these services reducing or growing?
   - BIG INCREASES EXPECTED, in some countries soon (2015) but in most others post 2020 / 2025
   - Main drivers for increase
     - Impact of large scale expansion of RES
       - Forecast Errors in energy
       - Loss of conventional generation plants and hence system services

Introduction to DSR SFC - Autonomous (ii)

5. What types of demands are expected to be suitable?
   - Industrial, commercial, domestic temperature controlled devices – Fridges, Freezers, Heat pumps, Air Conditioning, etc
   - Ensure primary purpose of device i.e. Heating and cooling is protected and only thermal hysteresis store is utilised – consumer impact negligible
6. How is it envisaged that this will be used?
   - Autonomous measurement and response at users internal point of connection of device
7. Will this be specified in this code?
   - Partly, the NC DCC only deals with CAPABILITY as per FWGL
8. Why is this capability proposed as becoming mandatory?
   - Service provides greatest socio-economic benefit in this manner
   - Every consumer has these devices hence ultimately everyone will contribute
   - Multiple versions for sale introduces undesirable complexity and is uneconomic
   - Bureaucracy of customer metering/billing/communication/etc increases costs of alternatives

Possible topics for discussion / feedback in this session / in consultation

CONTENT ISSUES

Stakeholder views:

- What supply chain challenges are envisaged for equipment?

View on ENTSO-E direction:

- The service provides widest socio-economic benefit with autonomously controlled factory fitted as standard in temperature controlled devices.
- What is your view on the ENTSO-E principle on minimising cost of provision through generalised rather than personalised tariff reduction?
- Views on introduction on national basis based on need and readiness and with:
    - Pan European collaboration – at least at synchronous area level
    - Details / specification through European Standards.

COMMUNICATION ISSUES:

- How can possible public fears best be managed?

- Thanks for your attention!

DSR SFC – Response example

•Response: