Stage 02: Working Group Meeting Summary

What stage is this document in the process?

01 Initial Assessment
02 Refinement Process ◄
03 Modification Report
04 Decision

SECMP0046'Allow DNOs to control Electric Vehicle Chargers Connected to Smart Meter Infrastructure'

Date and location

05/06/2018 Gemserv Offices

SECAS Contact:

Name:
Ali Beard

Number:
020 397 1105

Email:
SEC.Change@gemserv.com

Summary of SECMP0046 Working Group Meeting 1

There appeared to be overall support for a backstop solution to keep power flowing.

We agreed that we should consider other use cases and not just EV; all controllable load and potentially export.

We agreed we need to demonstrate that the solution(s) taken forward are the most economical.

Discussed the need to use monitoring & market mechanisms as much as possible before intervention and as a potential longer-term solution.

The subject of compensation and consumer messaging also came up as part of this.

We need to ensure we develop processes, responsibilities and guidance as part of any solution taken forward.

Discussed the need to consider impacts on security (CPA for new devices); User Systems security.

Potential Solutions

As part of the meeting the Working Group began discussing the two solutions put forward by the Proposer as well as some potential alternatives. A summary of each is provided below:

Proposer's Preferred Solution – HAN-Connected Smart EV Charger

HAN-Connected Smart Charger

Controllable by DNO

New device type and commands

Able to modulate charge rate (not just binary on/off instructions)

Proposer's Alternative Solution - HCALCS Connected EV Charger

EV charger connected via HCALCS (or ALCS)

Controllable by DNO

Existing device type and commands

Amendments to Access Control to allow DNO access to existing commands

Unable to modulate charge rate (only allows binary on/off instructions)

Supplier Management of Whole-Meter Load (Current Smart Metering Capabilities)

DNO monitoring at feeder level

Inform Suppliers of load limiting event & post code / MPANs affected

Suppliers set MPAN load limiting instruction (SR6.4.1) with start time, threshold, duration

Suppliers inform customers via chosen communications channels

Customer manages own load or exceeds load and self-disconnects whole load

Supplier re-enables supply upon disconnection

DNO Contract with Ancillary Services Provider

DNO monitoring at feeder level

DNO contracts with Ancillary Services Provider (ASP) to manage load locally

ASP installs battery in local area and sells service to DNO

DNO calls off against contract to reduce load through feeder

Potential Market Issues

The Working Group also identified a number of potential market issues:

How / will impacts on a Supplier's BSC Imbalance Position be managed?

How / will impacts on frequency response be managed? How sensitive is it? Is compensation required? What transparency requirements are there?

How / will conflicts between System & local peaks (and conflicts in instructions to shed / increase load / generation) be managed?

What monitoring & market signals are possible prior to a load management event. Will this start the clock for longer-term measures?

Should DNOs compensate impacted consumers and other parties, and who should they compensate?

Governance Issues

The Working Group also discuss potential governance:

Should a DNO actively seek (and provide info that will encourage) short-term market solutions before a backstop can be used?

Proposals from SSEN consultation document:

2 hours curtailment (to zero) in 24 hour period

8 hours curtailment (to zero) in 30 day period

18 months from first curtailment per feeder to long-term solution implemented

If solution has ability to modulate charge rate, 2 hours @ 100% reduction could be implemented as 20 hours at 10% reduction

Query that these should not exceed existing policies, such as load of load.

Suggestion affected customers should be rotated, where possible (not the same customers curtailed each time)

Should have ex-post reporting of curtailment events

Incentive scheme(s) should be in place: perhaps: i) to avoid usage in first place; ii) to avoid 18-month limit from being broken; iii) to avoid this becoming the de facto solution to avoiding reinforcement.

Next Steps

As far as immediate next steps, SECAS will focus on developing strawman solutions for each of the solutions noted above.

SECAS will also discuss the above solutions/issues with other Code Administrators (as well as the Electricity Market Reform (EMR) team at Elexon) to ensure we have as much oversight of potential impacts/touch points as possible.

We are still assessing how long it may take us to do this work. I aim to provide the Working Group with an update on next step timescales no later than next week.