

STC Section K in Operational Timescales

Further Thoughts Following Experts Teleconference

Following the presentation of the paper by Transmission Capital at the 29th May STC Modification Panel, it was agreed to have a teleconference between a panel of nominated experts to try and progress the matter further.

Teleconference Notes

A teleconference was held on Thursday 20th June. The following people took part:

Mike Lee	Transmission Capital (OFTO)
Milorad Dobrijevic	SP TO
Anthony Johnson	NGET (NETSO)
David Lyon	Blue Transmission (OFTO)
Neil Sandison	SSE TO

Following a description of the background to the issue, Anthony Johnson gave some background to the origins of Section K.

All parties were in agreement that there should be a mechanism to allow an OFTO system to continue to operate in a degraded condition, provided this was not detrimental to other Users.

NETSO is of the view, which is not shared by the TO community; is that in the absence of a specific STC mechanism, it would not be possible for an OFTO system to continue to operate in a degraded mode, as it is not in NETSO's gift to allow this. This would mean that in the absence of a derogation from Ofgem the system would have to be shut down (with the associated generation) until compliance is fully restored, even if there is no significant system impact of such operation. A post event derogation would be impractical, therefore it would be necessary for each OFTO to obtain a derogation prior to transfer from Ofgem to avoid this happening. It was noted by an OFTO member, that derogations should not be used to address generic issues, such issues should be resolved via the industry codes.

The onshore TO members both noted that the OFTO was required to make it system available to NETSO via the Services Capability Specification (SCS) in Section C of the STC, just as an onshore TO would. The same members also noted that the Operational Capability Limitation Record (OCLR) system was used on a daily basis by TO to record similar reductions in system capability and there was no reason why it could not be used in this case. It was suggested that an OFTO should wherever possible be treated the same as all TOs, to avoid OFTO specific obligations in the STC and to avoid unnecessary discrimination between different types of TOs.

The NETSO representative thought that a new process should be devised, which would be similar to the CP8 process in the Grid Code. It was suggested that could either be an amendment to STCP19-5, or an augmented process under STCP4-4. It was thought that the OCLR process was not rigorous enough in capturing long term ongoing compliance issues.

It was agreed that there were two possible solutions:

1. Use the existing OCLR process.
2. Form a working group to determine a new or revised process.

The options would be reported back to the STC Modification Panel.

Post Meeting Thoughts

To aid with this process, a table has been produced (Appendix 1) showing the different treatment of SVCs between the various parties that could potentially operate one. Whilst all provide the essentially the same electrical characteristics, the rationale for having them and treatment of them varies significantly.

An important point to note is that a generator currently operating a system incorporating an SVC, has via the Grid Code CP8 process, a mechanism to operate in a degraded mode and continue (in most cases) to generate. If that generator were to transition into an OFTO connection; currently that option would no longer be available as the issue would be dealt with under the STC, for which NETSO asserts there is no process to manage it. Under such a scenario, the losses to the generator could quite easily exceed £800k per day. This would appear to go against the principle that the OFTO process should not be detrimental to a connected generator and the duality between Grid Code and STC Section K.

Currently there are no operational OFTO systems incorporating SVCs. This is likely to change in the next few months with 2-3 systems possibly transferring before the end of the year. There is currently a great deal of nervousness within the OFTO community about these issues and there is a risk that it leads to delays in closure due to the uncertain impact on the OFTO's revenue. The generator community is not yet aware of these issues, but will no doubt have similar concerns, again threatening potential delays.

The timescales of a review group are at best 6 months to fully progress any modification. A 6 month delay will only lead to further uncertainty. It is suggested that a pragmatic solution would be to accept that in the short term that OCLR process is applicable to manage the issue, which as an affirmation of the status-quo requires no formal change governance. Whilst NETSO may have concerns about this, these can be allayed by immediately initiating a Working Group to design an enhanced process. As there are currently no OFTOs where this issue can arise, the timescale for resolution are similar to the timescales for appointing the first of the affected OFTOs. Hence the practical impact for NETSO is limited, but OFTO concerns are allayed as a process is in place.

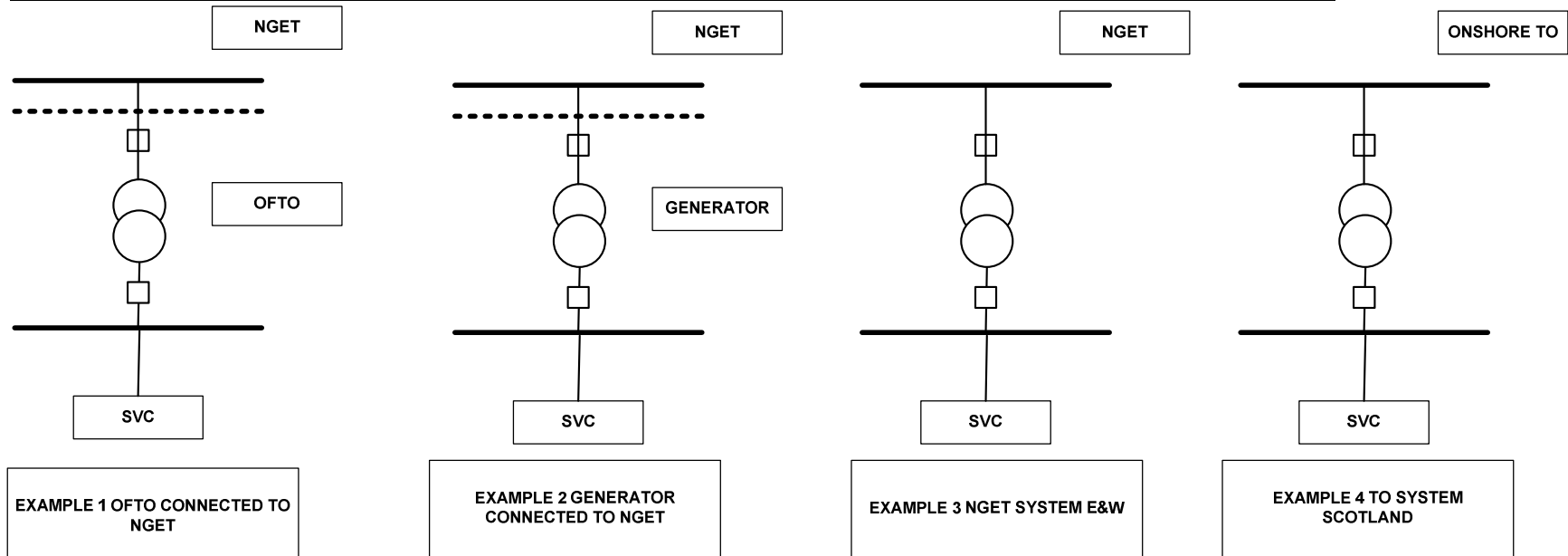
Recommendation from TO Community

The STC Modification Panel is requested to note:

1. that in the opinion of the TO members that OCLR process in STCP 4-4 is applicable to manage the degraded performance of OFTO assets with respect to STC Section K for a time limited period.
2. the intention to form a Working Group, to consider the enduring process requirements for managing shortfalls in STC Section K capability in operational timescales.

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APPENDIX 1 - SVC CONNECTION ARRANGEMENTS – CODE & LICENCE TREATMENT



EXAMPLE	1	2	3	4
Provision of SVC determined by:	Mandatory requirement based on STC Sec K. No test of specific need.	Mandatory requirement based on GC CC's. No test of specific need.	Need / economics based on SQSS	Need / economics based on SQSS
Compliance Required	Section D requires the system to be planned and developed in accordance with Section K. Compliance tested against Sec K and ISKN / FSKN issued.	Must meet the design requirements of GC CC and tested in accordance with GC CPs	Equipment commissioned in accordance in with internal procedures.	Equipment commissioned and tested in accordance STC / STCPs.
Cost	£25-30m per ~250MW generation block	£25-30m per ~250MW generation block	Typically £30m	Typically £30m
Cost Recovered from	Through TNUoS - to offshore connected generator	Generator directly funds	Through general TNUoS	Through general TNUoS

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Contractual requirement to make available	Through STC Section C and Services Capability Specification	Through connection agreement	None other than general licence obligations	Through STC Section C and Services Capability Specification
Mechanism to deal with outages / limitations	NETSO's current view is No, but shouldn't treatment be same as onshore TO?	Through GC CO8	Internal procedures	Through OCLR process in STCP4-4
Commercial implications of outage	£10k/hr OFTO & £40k/hr generator if no mechanism to deal with outages. Even for a minor fault total losses could exceed £2-3m.	None initially assuming no adverse system implications	None – but possible increased constraint costs on NETSO.	No immediate impact. Possible increased constraint costs on NETSO.
Technical Implications	Loss of reactive capability, but unlikely to be significant system impact if reactive power balance is neutral with SVC OOS.	Loss of reactive capability, but unlikely to be significant system impact if reactive power balance is neutral.	Other system actions are generally available.	Other system actions are generally available.
Redundancy	Systems are not redundant. Economics, land take etc prohibitive against providing additional capacity. General system over-provision of reactive power.	Systems are not redundant. Economics, land take etc prohibitive against providing additional capacity. General system over-provision of reactive power.	SQSS drives whole system redundancy.	SQSS drives whole system redundancy.
Visibility to NETSO	NETSO configures system through STC Sec C, has indications and hence high visibility.	May be hidden in generator system.	Full visibility	NETSO configures system through STC Sec C, has indications and hence high visibility.
Strength of Licencing Regime	Very High. Licence obligations to comply with STC. Revenue comes via licence.	Weaker as obligations to comply with codes are contractual.	High, but NGET TO does not have to comply with STC. Revenue comes via licence.	Very High. Licence obligations to comply with STC. Revenue comes via licence.

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