

Code Administrator Meeting Summary

GC0141: Compliance Processes and Modelling amendments

Date: 15 December 2021

Contact Details

Chair: Nisar Ahmed, National Grid ESO

Proposer: Mark Horley, ESO

nisar.ahmed@nationalgrideso.com mark.horley@nationalgrideso.com

Key areas of discussion

The Workgroup discussions are summarised according to the agenda items:

Marko Grizelj Proposal

- The Proposer (MH) highlighted that this proposal has similar requirements to the Original proposal and the guidance from the Legal Team would be beneficial to note. A summary of relevant extracts from CUSC following legal guidance would be circulated to the Workgroup. **ACTION**
- There were no further updates from MG and no further comments or concerns from Workgroup members following papers issued pre-meeting.

Review of Planning Code PC.A.9 (Original Proposal): Control System Model Requirements for Users

MH talked through proposed changes to the legal text. The following points were noted:

- The ESO do not have capability to use models with DLL hence compliance models need to be RMS. Supplementary models may be provided in certain circumstances. Emphasis that there are differences between RMS and EMT model performance as the modelling environments have different levels of detail, this should be noted in the Workgroup Report.
- In in relation to concerns raised with destroying copies of models as provided in PC.A.9.6.2.4(vi) in case work had to be re-visited, it was clarified that the ESO would keep data in their database and are able to re-issue upon User request.
- Clarified that the principle behind the proposal is not to require Non-Disclosure Agreements because Users are covered by confidentiality provisions in the CUSC.
- In relation to 9.9.2, to clarify initialisation time for EMT PSCAD models of HVDC converters and to add connection to equivalent 'Thevenin' source.

The Workgroup members raised the following issues/concerns:



- It may be beneficial to include a timeframe in the *PC.A.9.6.2.4(vi)* but concerns that attaching timeframes could result in Manufacturers keeping hold of models for longer periods than needed.
- Concerns around the timing. There are various reasons a model fails for up to 10 seconds or more, but flexibility is required to keep initialisation period to a minimum to reduce the time a User spends simulating. The Proposer to reword 9.8.3.3 including that, for compliance, Users would have the options to provide an RMS model containing DLL as well as the required model without DLL for compliance. Users already have option for an additional alternate encrypted RMS model PC.A.9.6.1 (not for compliance but for potential sharing).
- The ESO should consider applying more flexibility to compliance agreements.

Review of Damian Jackman's Alternative

Alternative 12 - Alternative Compliance Repeat Plan

- There were no further comments or concerns from the Workgroup on the principle or proposed changes sought by this proposal.
- It was agreed that this alternative is independent of others and should not be combined. The Workgroup by a majority voted for this alternative to formally become a formal WAGCM.

Alternative 5 - To limit the requirement for an Independent Engineer only to new connections that could exceed the 600MW threshold for a Normal Infeed Loss Risk

- Concerns that there was no defined benefit of intervention from an Independent Engineer (IE) for smaller sites (11MW synchronous hydro generators) and scrutiny of small Users.
- For complex connections, It may be more efficient if the IE is directly engaged by the ESO without the
 User playing the role of a 'middleman' since they are required to engage with the ESO in such
 circumstances. Hence consideration for the ESO to take full ownership of the relationship of the IE through
 the connection process.
- No clear provision of the threshold above which an IE would be required. A Workgroup member noted
 that findings from FCRC current project which covers consecutive loss may be relevant to the issue of
 threshold capping.
- It was suggested that this alternative proposal may be combined with others, but the requirement of a fixed threshold limit must be maintained.
- The Workgroup agreed that this Alternative would not proceed any further and will be removed from the Alternative Matrix.

Discussions on Alignment of Bilateral Construction Agreements (BCA)

- MH advised that if a User is connecting before the implementation of this modification, there is the choice of following their BCA or the requirements of this modification.
- It was clarified that where there is no stipulation from the Grid Code on compliance, then the BCA
 provisions should be followed. Also, the BCA should be followed where the GC specifies that it should
 apply.
- MH advised that concerns should be legitimately raised where a Workgroup member notices an inconsistency in their BCA and the Workgroup's discussions whether connection date is before or after Grid Code requirement implementation date. In the case of a conflict between the model requirements of a BCA and the Grid Code, the Grid Code would take pre-eminence over BCAs for connections after the implementation date stated in the Grid Code.
- Derogations are granted by the Ofgem not the ESO and are available on the Ofgem website. Derogations will not necessarily appear on BCAs unless where historical ones are referenced for information.



Review of alternative matrix and possible permutations

- David (ESO rep) gave an open question to the workgroup to review the matrix and if there were any that could be combined or released to get a final set of permutations.
- MA suggested combining alternative 8 with other alternatives it is compatible with
- The Workgroup were tasked with reviewing the alternative solutions and sharing comments/suggestions
 of options that could be combined or eliminated ahead of the next workgroup meeting. ACTION
- It was agreed that all permutations whether approved or nor approved should be presented to the Authority. Further work to be done on this to determine the best way it would be presented as there are several of them

Next Steps

- Review outcomes of scrutiny of alternative/permutations by all Workgroup members.
- Deliberate on suggestions regarding alternative proposals.
- Finalise the Workgroup report in February for presentation to Panel.

Actions Log

Number	Action	Owner	Status
1	Circulate a note/presentation explaining confidentiality provisions under CUSC	Mark Horley	Open
2	Clarify initialisation time for EMT PSCAD models of HVDC converters -Add connection to equivalent 'Thevenin' source to PC.A.9.9.2 -Handling of warnings within RMS models. Use minimisation rather than none.	Mark Horley	Open
3	ESO to review options for a user to provide an RMS model containing DLL in addition to the required model without DLL for compliance.	Mark Horley & David Holford	Open
4	An updated version of the option matrix to be sent out to the workgroup to review prior to next workgroup meeting	David Halford and all workgroup members	Open
5	Code Admin to issue draft of GC0141 Workgroup Report to the Workgroup for review and comments along with meeting summary, actions and updated timeline	Nisar Ahmed	Open
6	Review draft Workgroup Report and provide comments	Workgroup members	Open
7	Review Mark's updated legal text PC.A.9 RMS & EMT Model to determine if it covers alternative 14 requirements	Marko G	Open



Participants

Attendees	Company	Position
Nisar Ahmed	Code Administrator National Grid ESO	Chair
Banke John-Okwesa	Code Administrator National Grid ESO	Technical Secretary
Mark Horley	National Grid ESO	Proposer & Workgroup Member
David Halford	National Grid ESO	Workgroup Member
Isaac Gutierrez	Scottish Power	Workgroup Member
Nicola Barberiis Negra	Orsted	Workgroup Member
Marten Aten	Uniper Energy	Workgroup Member
Sigrid Bolik	ORE Catapult	Workgroup Member
Marko Grizelji	Siemens	Workgroup Member
Colin Foote	SP Energy Networks	Workgroup Member
Pukar Mahat	Siemens	Workgroup Member
Ben Marshall	SSE	Workgroup Member
Michael Smailes		Workgroup Member
Afshin Pashaei	National Grid	Workgroup Member
Julie Richmond		Workgroup Member
Arnaldo Rossier	National Grid ESO	Workgroup Member
Tim Ellingham	RWE	Workgroup Member

For further information, please contact the Code Administrator.