


SC A1 ADVISORY GROUP A1.02 – Hydro Generators WG A1.02-3 Generator Fire Protection Scope of work: Experience Update QUESTIONNAIRE	
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Company/Entity:
 SWECO

Main activity group (please check)	<input type="checkbox"/>	1	Generator user (owner)
	<input type="checkbox"/>	2	Generator Manufacturer
	<input type="checkbox"/>	3	Insurance Company, Reinsurance Company or Insurance Broker
	<input type="checkbox"/>	4	Erection, Commissioning, Refurbishment, Maintenance.
	<input type="checkbox"/>	5	Research Centers and Universities
	<input checked="" type="checkbox"/>	6	Consulting Companies

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Cigré member? - Yes - No

This questionnaire has specific sections for each activity group.
PLEASE CHOOSE THE ONE THAT YOU FIT MOST.
The size of each specific section is reasonable. You can answer in a “skip if not applicable” basis, but we encourage you to participate in all sections where you feel comfortable to collaborate with this experience update, sharing your experience with the other groups.

Notes about the fulfillment of this questionnaire:
 You can fill the questionnaire directly in your computer – please use the check boxes and use the grey expandable fields that allow you to input your text information (therefore we did not number the pages) - and send the resulting file per e-mail – please rename it adding your name. It is also possible to print the questionnaire and fill it by hand, although this is a “computer version” (printed copies do not show the grey fields). In this case you can use the back of the pages for more space – don’t forget to indicate the corresponding answers items. In case of multiple answers / examples please feel free to send tables with the pertaining data. For our works’ sake we do prefer computer filled questionnaires


Note of the Convener:
 Please feel free to contact Alexander Gromow should you need any assistance concerning this questionnaire – a.gromow@gromow.com (new). In fact we appreciate your questions in order to help to level the Questionnaires’ results. These additional questions themselves may be part of the experience update’s report.
 The validity of this Experience Update will rely on the quantity and quality of answers received therefore we are most interested in participate and collaborate with all the interested parties in order to gather these information and be able to elaborate a reliable conclusion report in the best possible way.

Brazilian Regular Member of SC-A1: Erli Ferreira Figueiredo <erliff@uol.com.br >
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6) Questionnaire with focus on Consulting Companies.
<p>This questionnaire is an update in which this particular section is dedicated to the Consulting Companies that usually issue at least the project specification for the Generator Fire Protection. As already stated before in our opinion from the fire protection standpoint, the generator and its housing have to be considered as a whole in the design when fire extinguishing is to be installed, in order to guarantee the system's functionality and efficiency integrated in the concept of the power plant as a whole. With these questions we intend to get valuable information from the particular stand point of the Consulting Companies in order to compose a picture as complete as possible of the subject we are dealing with to see if the opinions do converge or not to the same point.</p>
<p>6.1) Is your company specialized in the design of the Generator Fire Protection:</p> <p><input type="checkbox"/> - Isolated (only the equipment itself)</p> <p><input type="checkbox"/> - Integrated in the power plant design</p> <p><input type="checkbox"/> - Whole power plant design including the Generator Fire Protection</p> <p>Any comment on that? Our company does not design GFPs. Generally the whole power plant layout is supported.</p>
<p>6.1.1) Should you work specifically with the Generator Fire Protection Equipment (not as a power plant designer) in which moment of the power plant's project are you normally engaged by your customer:</p> <p><input type="checkbox"/> - bid stage (in order to get the data for the Generator Fire Detection's specs)</p> <p><input type="checkbox"/> - after the generator supplier was already defined</p> <p><input checked="" type="checkbox"/> - in a stage when your expertise will be taken in to consideration in the whole project including the required civil work for the proper adaptation and safe function of the Generator Fire Protection</p> <p><input type="checkbox"/> - None of the above, please specify:</p> <p>Any comment on that?</p>
<p>6.2) There are the factors (or reasons) that lead your clients to order a Generator Fire Protection project from your company. According to your experience, considering these factors, who decides if the generators have to be equipped with Generator Fire Protection?</p> <p><input type="checkbox"/> - The customer that place the order to you (not necessarily the final user – it may be the integrator)</p> <p><input type="checkbox"/> - The insurance companies that demand it towards the final user in order to cover the power plant's risk</p> <p><input type="checkbox"/> - The final user that may earn financial advantages towards the insurer by installing such a protection and requires it either directly or via integrator.</p> <p><input type="checkbox"/> - Power plant workers Labor Union Demands towards the final users</p> <p><input checked="" type="checkbox"/> - Final users' own internal philosophy</p> <p><input type="checkbox"/> - You are asked to give an advice/opinion</p> <p>Any comment on that? We do not supply GFPs. Generally the GFP's purchaser decide if a generator has to be equipped with GFH.</p>
<p>6.3) If the choice is yours do you have a preferred extinguishing method?</p> <p><input type="checkbox"/> - Yes</p> <p><input checked="" type="checkbox"/> - No</p>

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If yes please indicate which:

If no, please indicate how you determine the extinguishing media for each particular case:
 With modern generators / windings that don't maintain fire, we usually don't install extinguishing facilities.

6.3.1) – If you have the choice, which is the extinguishing media you usually chose for:

a) Above water power plants (open-air): Water mist spray

b) Cavern type power plants: Water mist spray

6.4) From your experience, which is the type of generator fire extinguishing method more frequently used nowadays?

- CO₂

- Water Spray

- Inergen

- Other

If other please specify:

6.4.1) Do you recognize any change towards the former trend (status quo) in fire protection systems your country?

- Yes - No

If yes, please state it here:

6.5) Are there standards recommending generator fire protection in your country?

- Yes - No

6.5.1) If yes, which standards are these?
 SS-EN

6.5.2) If not which standards do you follow in your work?

6.5.2.1) Are there critical items in the application of these Standards that require special attention?
 Local insurance practice and regulations

6.6) Considering the existence of the recently launched standards (for instance NFPA 851), is there a need of any additional specific international standard on generator fire protection?

- Yes - No


Any additional comment? Please state here:

6.5) What is the state of the art in the detection in accordance to your experience?

- Smoke

- Heat

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<input type="checkbox"/> - Fame <input checked="" type="checkbox"/> - Other – please describe: Aspirating smoke detection system
6.5.1) Which are the types of detection devices you normally use and/or recommend?
6.5.2) Do you recommend any specific detection and control system to minimize unwanted fire extinguishing system operation (here is meant the unwanted release of the extinguishing media)?
6.6) Do you usually cooperate with the generator manufacturer on the Generating Fire Protection Question? <input type="checkbox"/> - Yes, there is a cooperation and joint work <input checked="" type="checkbox"/> - No, our work ends with the issue of the specifications <input type="checkbox"/> - It depends from case to case, please specify:
6.7) Do you usually cooperate with fire protection equipment manufacturer on the Generating Fire Protection Question? <input type="checkbox"/> - Yes, there is a cooperation and joint work <input checked="" type="checkbox"/> - No, our work ends with the issue of the specifications <input type="checkbox"/> - It depends from case to case, please specify:
6.8) Do you work also on refurbishment of Fire Protection Equipment on hydro generating plants? <input checked="" type="checkbox"/> - Yes <input type="checkbox"/> - No Do you have any comment on this issue you would share with us?
6.9) Do you follow you projects during erection and commissioning phases? <input checked="" type="checkbox"/> - Yes <input type="checkbox"/> - No If yes, can you tell us what are the most frequent problems you had to face in the case of the Fire Protection Equipment?
6.10) In your opinion is a Generator Fire Protection installation required nowadays? <input type="checkbox"/> - Yes <input checked="" type="checkbox"/> - No Do you have any comment on this issue you would share with us?
6.11) According to your opinion, is there any question that is missing in this part of the questionnaire? <input type="checkbox"/> - Yes <input type="checkbox"/> - No If yes, please state it here:

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