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A USE CASE METHODOLOGY TO HANDLE CONFLICTING CONTROLLER REQUIREMENTS FOR FUTURE POWER SYSTEMS

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This research exchange aimed to propose a standards-based requirements elicitation and analysis strategy tailored for smart grid control structure development. Control structures in electric power systems often span across several systems and stakeholders. Requirements elicitation for such control systems therefore requires coordination across many stakeholders and it is challenging to achieve a consistent design. To enable an iterative and distributed development we suggest a conflict management approach as a modular element of the design strategy, focusing on conflict identification and tracing. The idea is to describe a process starting from a tailored IEC 62559 template amended for recording controller conflicts and adapting the underlying use case management repository for collaborative work. Conflict identification is supported by Multilevel Flow Modeling providing abstracted conflict patterns. Based on this work a modified Use Case template has been published [5].

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