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Digital companions - exploiting a new quality for control center operation

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Operators face an increasing level of complexity and stress in their daily work. Artificial Intelligence (AI) will be integrated in SCADA systems in the future to support operators. More tasks will be automated. However, the operator will still be responsible for final decision-making. Digital companions could close this gap and exploit a new quality in the cooperation between human operators and the control center system.

This presentation will introduce the "early warning digital companion" to illustrate a possible future interaction based on AI. The cooperative nature of the concept allows operators to interactively explore potential future problems in the power grid based on operator experience and easily access mitigation measures that were proven to be effective in the past.

Besides this concrete example, the presentation will discuss - based on a recent study of Burmester et al. (2019) - how digital companions can create a positive user experience and increase operator resilience towards stressful situations.

Reference

Burmester et al. (2019). *Creating Positive Experiences with Digital Companions.* CHI'19 Extended Abstracts, May 4-9, 2019, Glasgow, Scotland, UK.

Please send the Abstract to **dsobajic@gridengineering.com** by April 12