

ON CCGT-PROGRAM, CRM DESIGN AND BESS DEVELOPMENT

14 Oct 2024

Resource adequacy and hydrogen-ready CCGTs: Germany plans to phase-out coal fired power plants "ideally" by 2030, eight years before 2038, the exit date specified in the coal exit law. This increases the need for timely investments in back-up capacities as Germany faces a structural capacity gap estimated at 21 GW of new-built capacity required online by 2030.

To address both resource adequacy and the market ramp-up of hydrogen-ready generation technology, **Germany's power plant strategy foresees a total of 12.5 GW of new and modernized CCGTs**, of which 7.5 GW will be hydrogen ready to run on pure hydrogen as from the 8th year of operation.

• Important for ENGIE is clarity on the auction design and a fair risk sharing regarding the future availability of hydrogen. Many details remain unclear at this moment, amongst which stand out opened questions regarding unilateral risks for operators in the event of being unable to execute a hydrogen fuel switch as a result of events that are not the responsibility of the plant operators.

Regarding the **planned introduction of a CRM by 2028**, BMWK is currently favoring a combined CRM, consisting of a first segment with a centralized CRM for capital intensive new-built capacities with 15 year long duration capacity contracts and a second segment with a decentralized 3 year forward market for capacity-obligations similar to the French CRM design.

- ENGIE advocates for a centralized CRM design, allowing for the participation of BESS and the provision of long-term contracts to incentivize investments in new capacity by new players. The duration of remuneration contracts should be linked to investment intensity for a cost-effective refinancing of new investments, as well as for major overhauls and lifetime extensions of existing assets. Capacity contracts with shorter duration (as in a decentralized capacity-obligations market) are providing less visibility, will reduce risk mitigation of the project and will therefore result in higher financing costs.
- ENGIE voices concerns over the capability of other CRM designs such as the combined CRM, and policy measures such as hedging requirements to sufficiently and timely deliver resource adequacy. As a global energy player ENGIE is active in several European countries with different centralized CRM designs, amongst which Great-Britain, Belgium and Italy, offering a wealth of insights for improved policy designs in Germany. We believe that a deviation from best practices acquired in several European Member States in CRM design and approved by the European Commission would eventually delay investment and worsen the adequacy outlook.

Regarding BESS, the Ministry of Economic Affairs (BMWK) published a power storage strategy in March 2024 identifying regulatory barriers to the development of BESS. The strategy identifies needs of action, but the proposed measures could be more ambitious.



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The BNetzA has already initialized first reforms such as accelerated planning, permitting and grid connection procedures. In the medium term, a lack of grid connections will continue to remain a major hurdle to BESS project development.

Valuable reforms on co-located BESS market integration are expected to take effect as from July 2025 and July 2026 respectively, enabling the market-based use of RES co-located BESS assets without losing green GoOs. The implementation should be well prepared with sufficient lead time and in close cooperation with the industry.

ENGIE advocates for a clear and comprehensive investment framework, e.g. a
transparent and uniform system of grid connection fees and costs, permanent grid fee
exemptions beyond 2029 (currently only 3 year prolongation of exemptions) and a levelplaying field for BESS as a flex option in the upcoming CRM design and system/ancillary
services markets.