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Implementing Hydropower Scheduling in a European Expansion Planning Model

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hydropower planning wind revamped enhanced Mosel developed intermittent investment total Europe earlier place extensive thereby models runs implementation overvaluation relaxed expansion data like formulation solar representation optimization purpose implementing system Master time original water results sector user limits peaking written transmission important Xpress investments framework cost final maximum proposed energy set European scheduling thesis reservoir values share run-of-the-river capacities renewable SINTERF causing order RES means optimal replace capacity lower challenges deployment renewables new generation costs sources availability relative leads costs sources curtailed