

System Implications of Intermittent Generators

Alex Pavlak (University of Maryland) - alex2@pavlak.net

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Abstract. In a system that requires electric power on demand, intermittent generators (wind, solar, tides, waves) cannot stand alone. The rest of the system must provide power when the intermittent resource is unavailable. Therefore a system perspective is essential to assess overall cost and performance. Classical systems architecture explains the relationship between intermittent generators and the rest of the system. Simple subsystem analysis points to hard constraints and knowledge that needs to be gathered before we can conclude that intermittent generators are consistent with clean systems.