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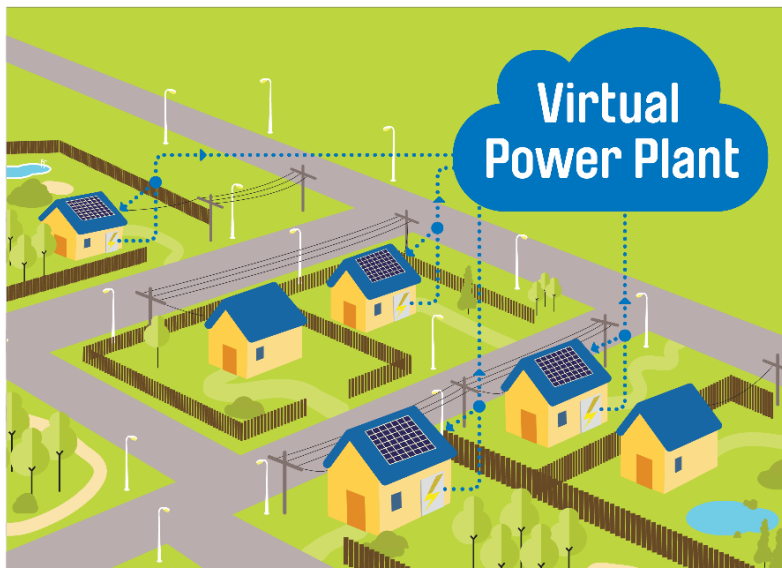
## Grid Voltage and the Participation of Distributed Energy Recourses

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### Abstract:

*High rooftop PV Solar penetration in low voltage feeders have brought with them the need to manage voltage at a level that hasn't been done before in Australia. In this paper we will explore what the data tells us about the current level of this problem and expected evolution. We will also explore 3 specific cases from AGL's South Australian Virtual Power Plant project to understand current impacts for customers, both technical and monetary. The paper will then investigate possible solutions and their implications for all stakeholders and point a way forward so the industry can proactively engage with the problem and mitigate its effects, whilst preparing for a future grid with much higher Solar PV penetrations and bidirectional power flows as business as usual.*



**Key words:** Low Voltage, Anti Islanding, Solar PV, Energy Storage