Energy Storage in Remote Australia: conniptions and kerfuffles

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ACEP/Powerwater Remote Operations

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Abstract

A review of energy storage in hybrid systems in Remote Australia including the messy bits (well a wee bit at least).

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They taught me all I knew,
Their names are What and
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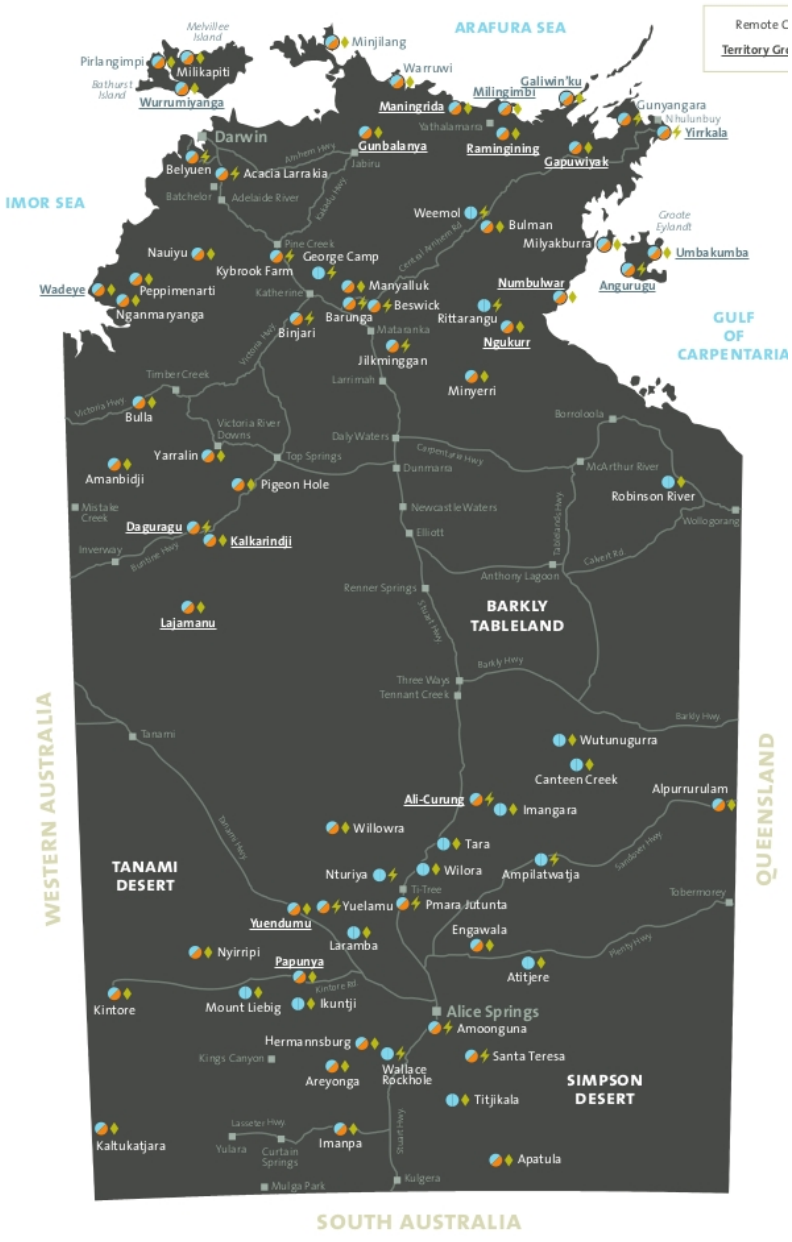
- *Feel free to interrupt or redirect me.*

Northern Territory/Powerwater



- Early SMA systems for delaying gen switch up (20y lifetime).
- Small ($\approx$ 50kW) PV/Wind systems.
- Concentrated PV with limited smoothing.
- Ti Tree, Kalkarindji and Lake Nash ($\approx$ 1MW total PV, 80% peak penetration).
- ASIM and Solar Diesel Handbook.
- Medium Pen Rollout.
- High Pen Diesel off systems.

Western Australia/Horizon Power, Verve Energy

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- But I'm sure something will happen.

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- Round trip efficiency is important.Well perhaps but if you can give me a cheap 500kW solution with 50% round trip efficiency I'm going to buy it.
- Its about energy and load shifting.A bit, it turns out that most of our NT work will be power limited using East/West arrays (or tracking).

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- And difficulties in sizing sets for loads.

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- Continue working on a variety of projects in order to improve system performance.

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neither is survival" – W. Edwards Deming