

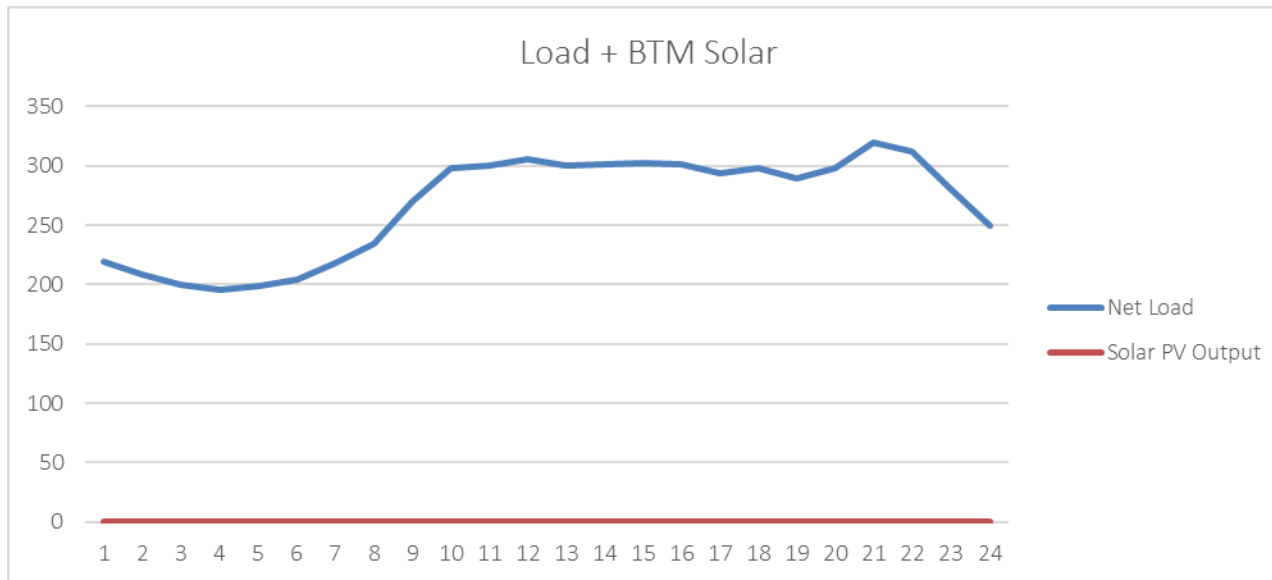
# CCA Distribution Integrated Resource Planning

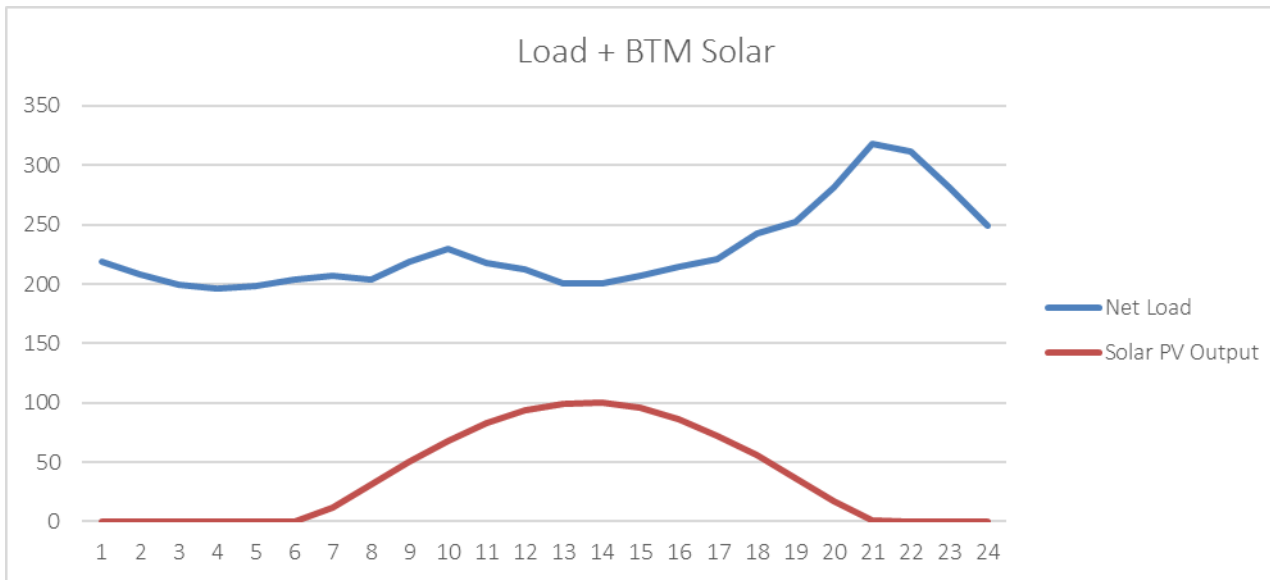
Planning increases DER value, lowers procurement cost for CCAs

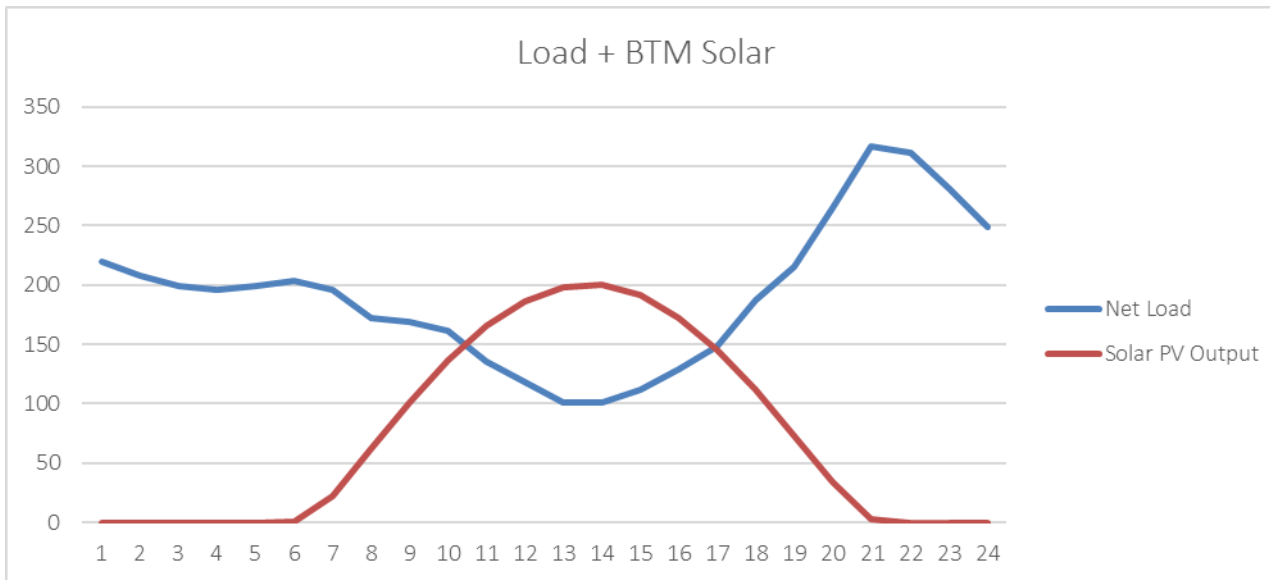
Business of Local Energy Symposium

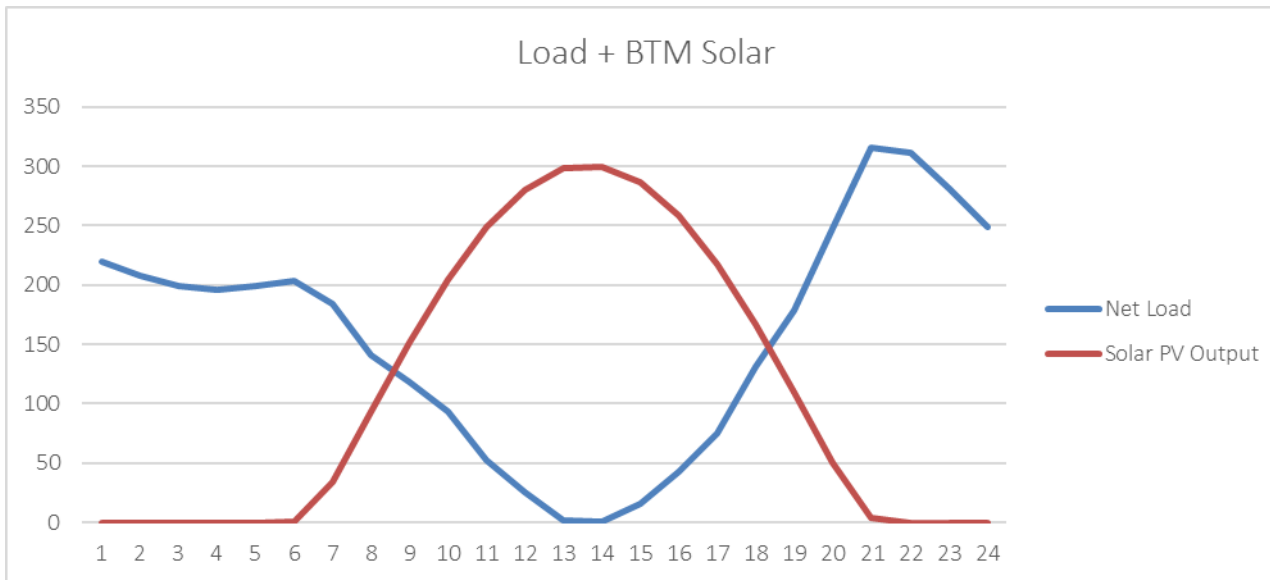
02 May 2017

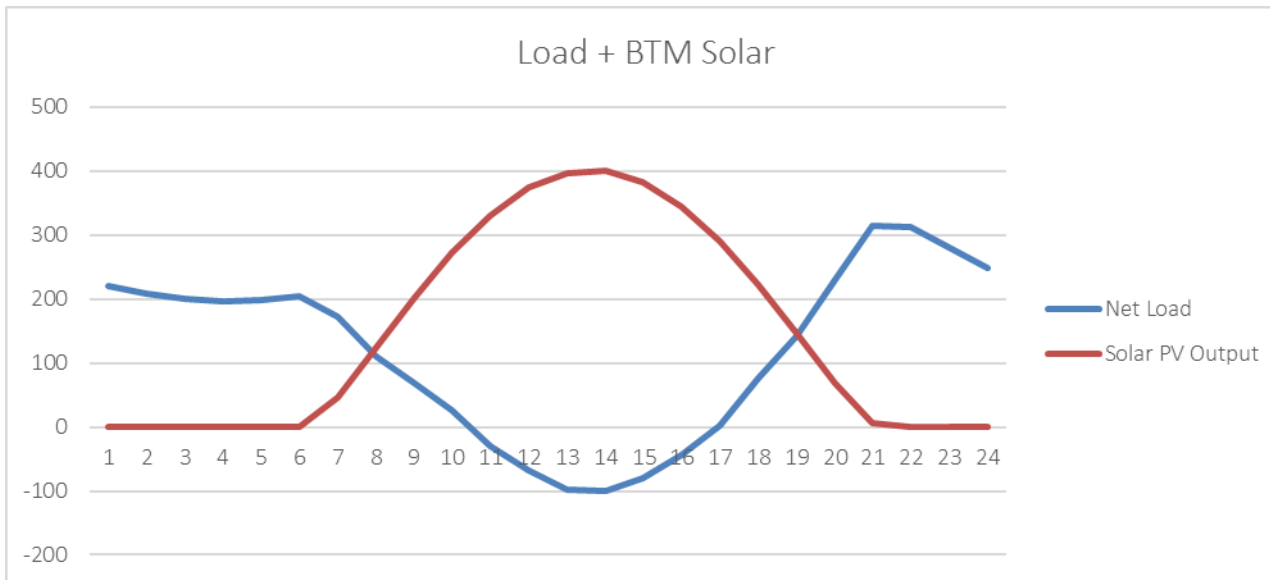
# The Local Duck – an example



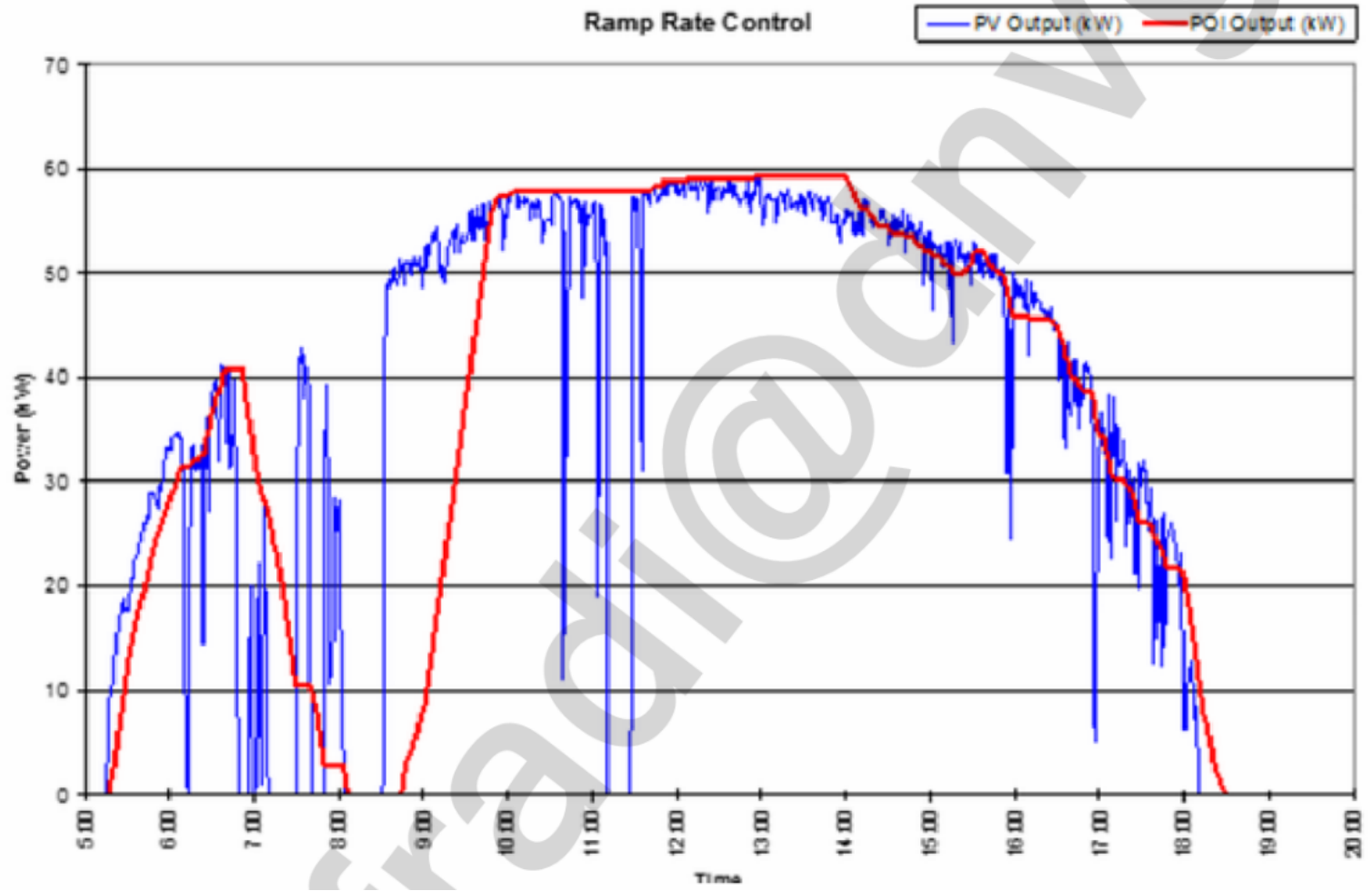






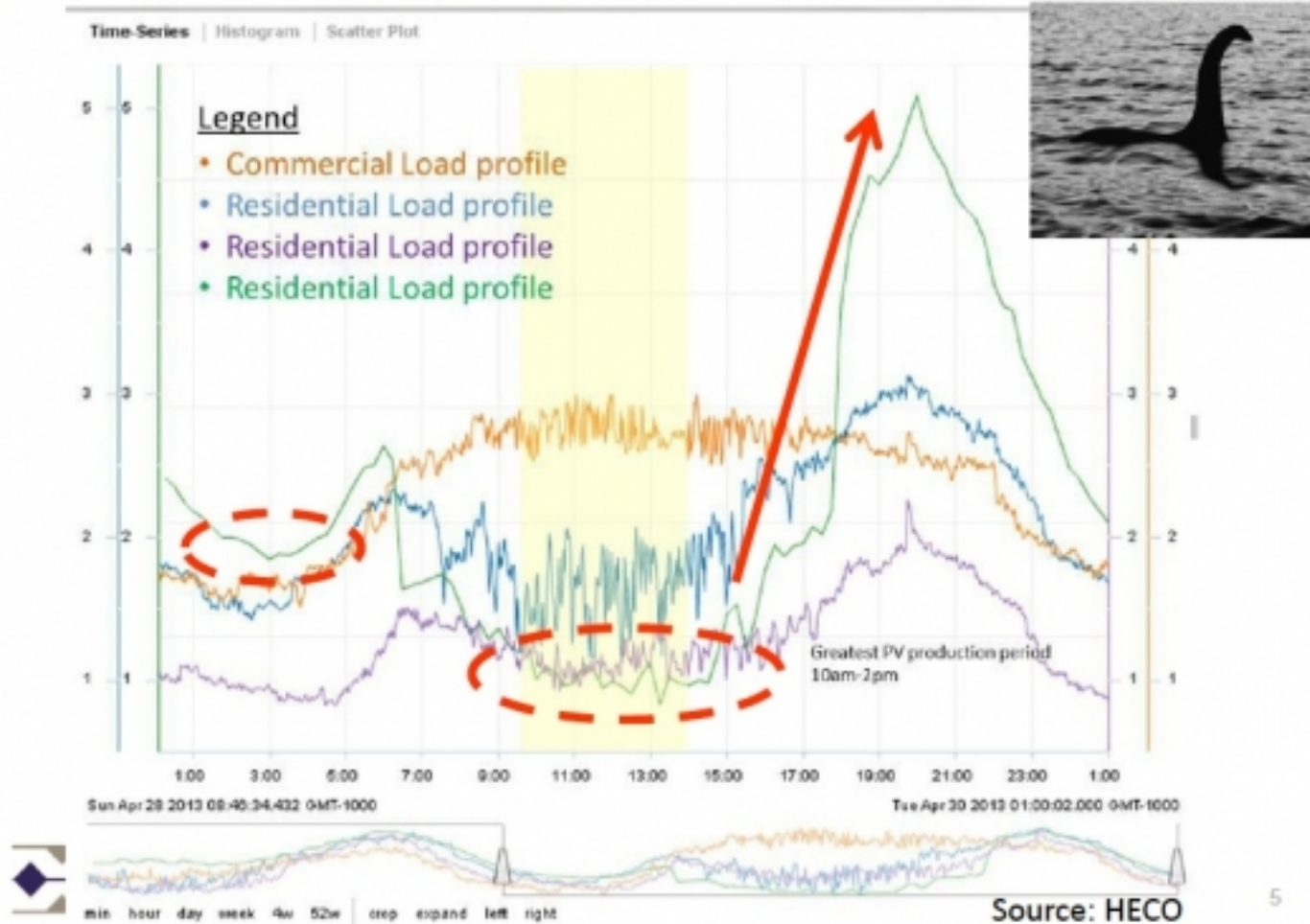


# Solar "Hair"



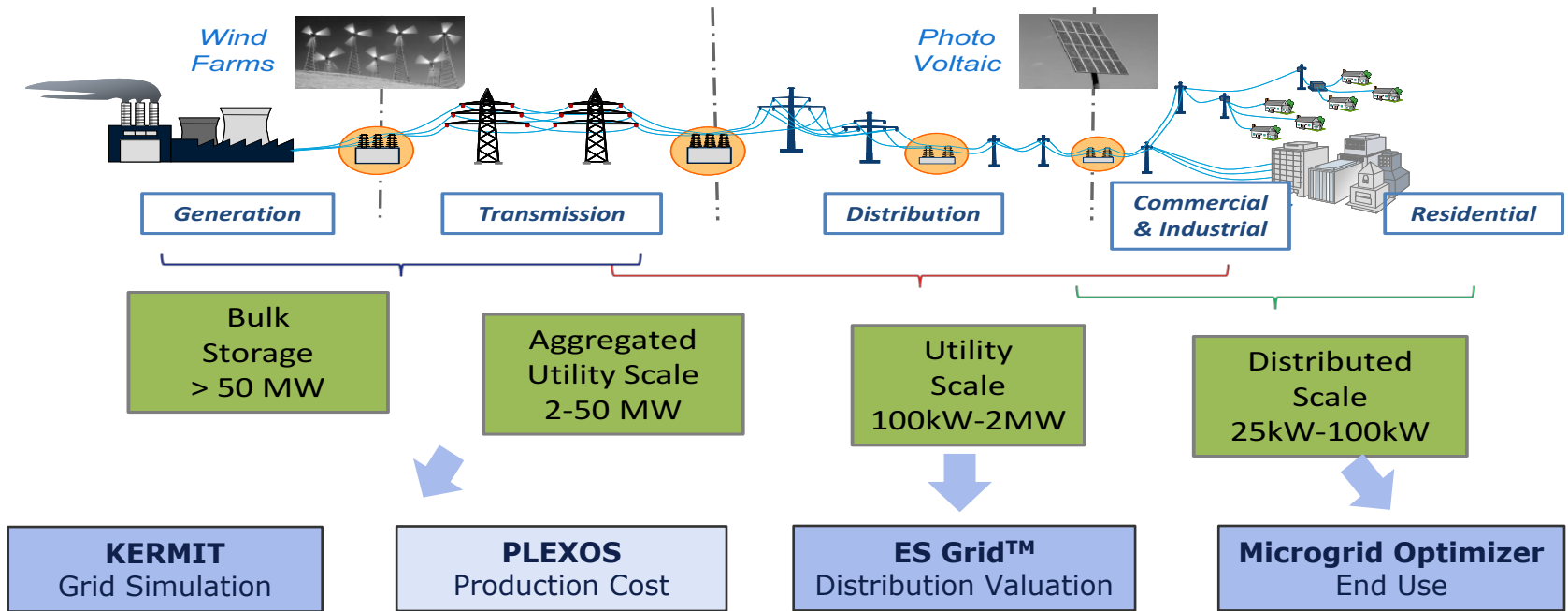
# The Hairy Local Duck

## Trending Hi-Pen Circuits (12kV) – Loch Ness Profile





# DNV GL Suite of Modeling Tools



## Applications

- Renewables Integration
- Frequency and Reliability
- Storage and DERs
- Resource Planning
- Policy analysis
- Congestion and renewable energy curtailment
- Asset valuation and market design
- Investment strategy
- Microgrids
- Voltage support

 \*DNV GL Proprietary Tools

# Thank you!

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