DOE Wind Consortium Project

Wind Energy Research and Development

IIT, Chicago
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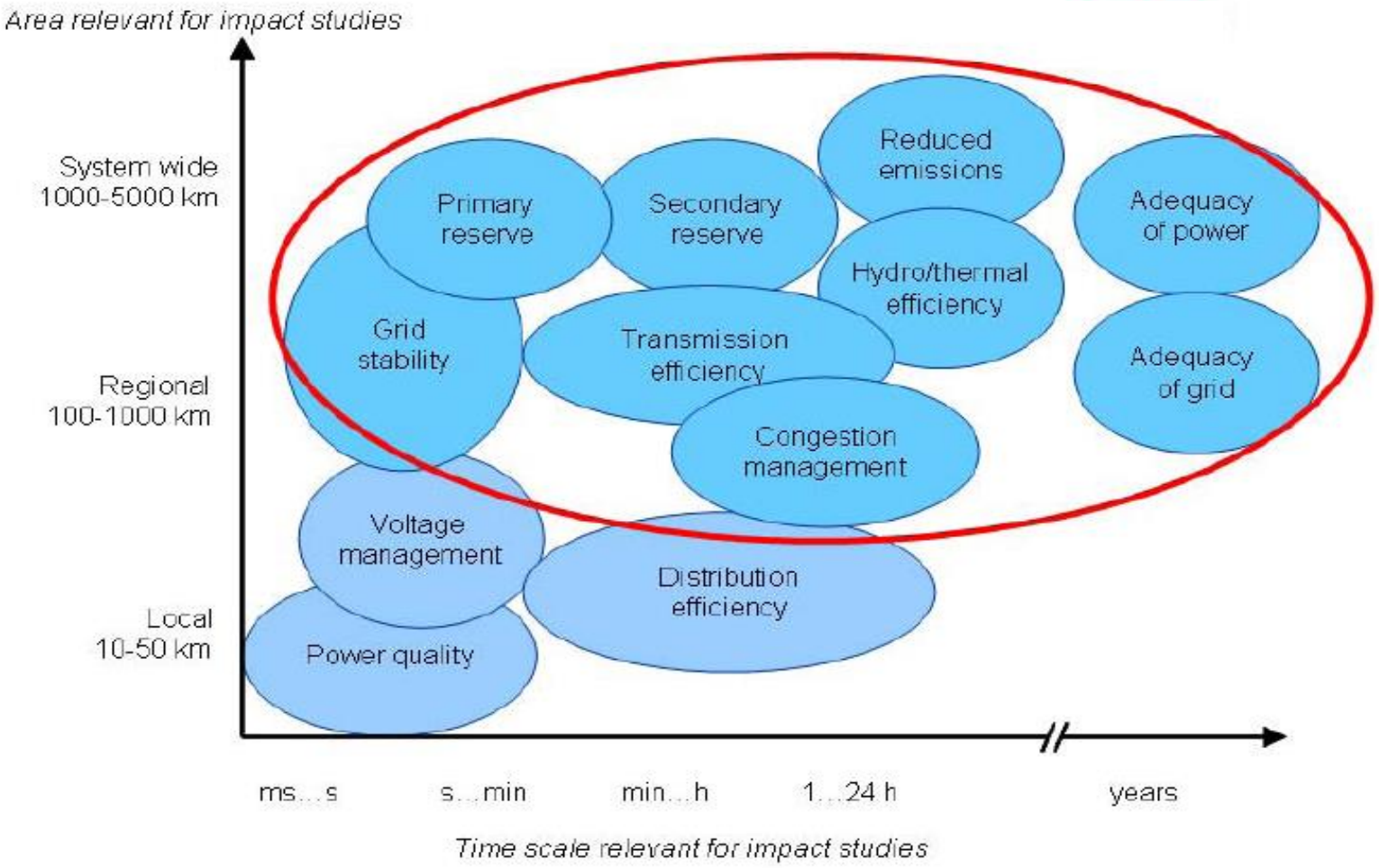
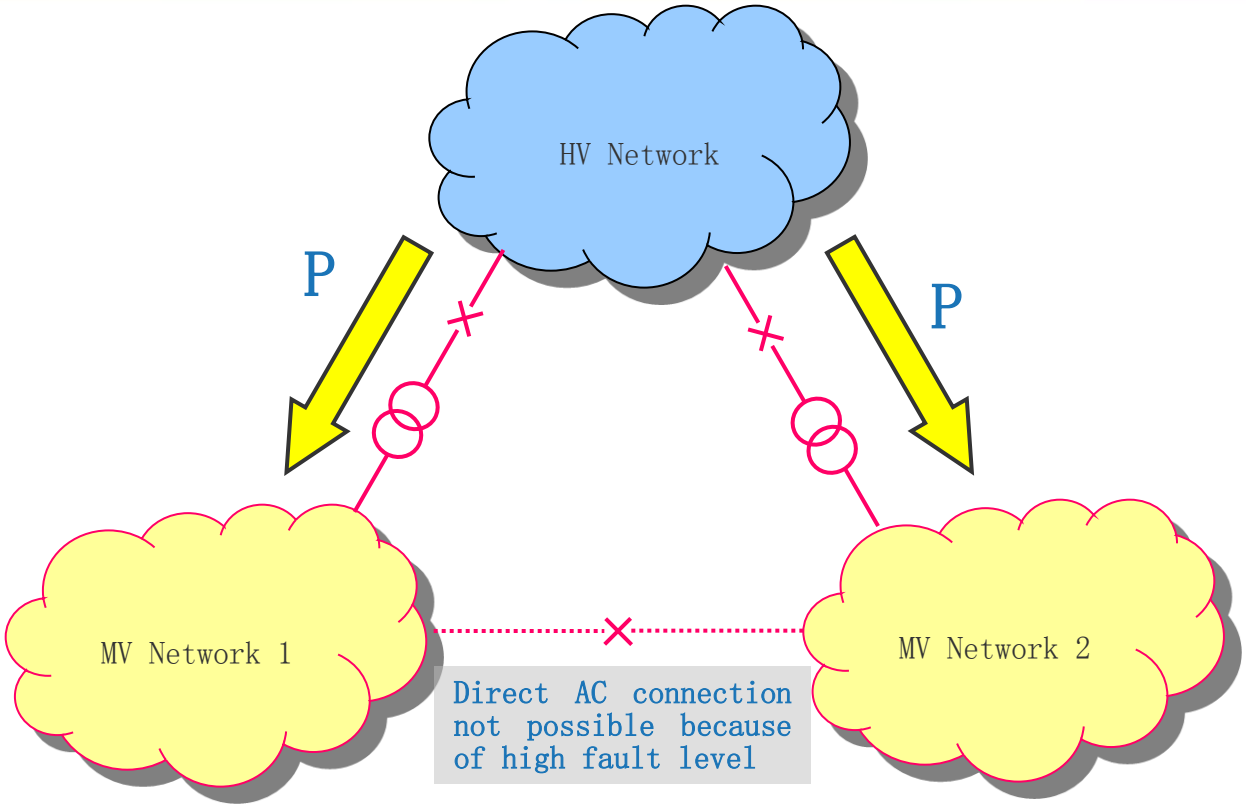
Possible Impacts of Wind Power on Grid Operations



(Source: IEA Wind Task 25, 2009)

Generation and Load Demand Balance



The traditional model:

- Network designed for power flow from HV to MV

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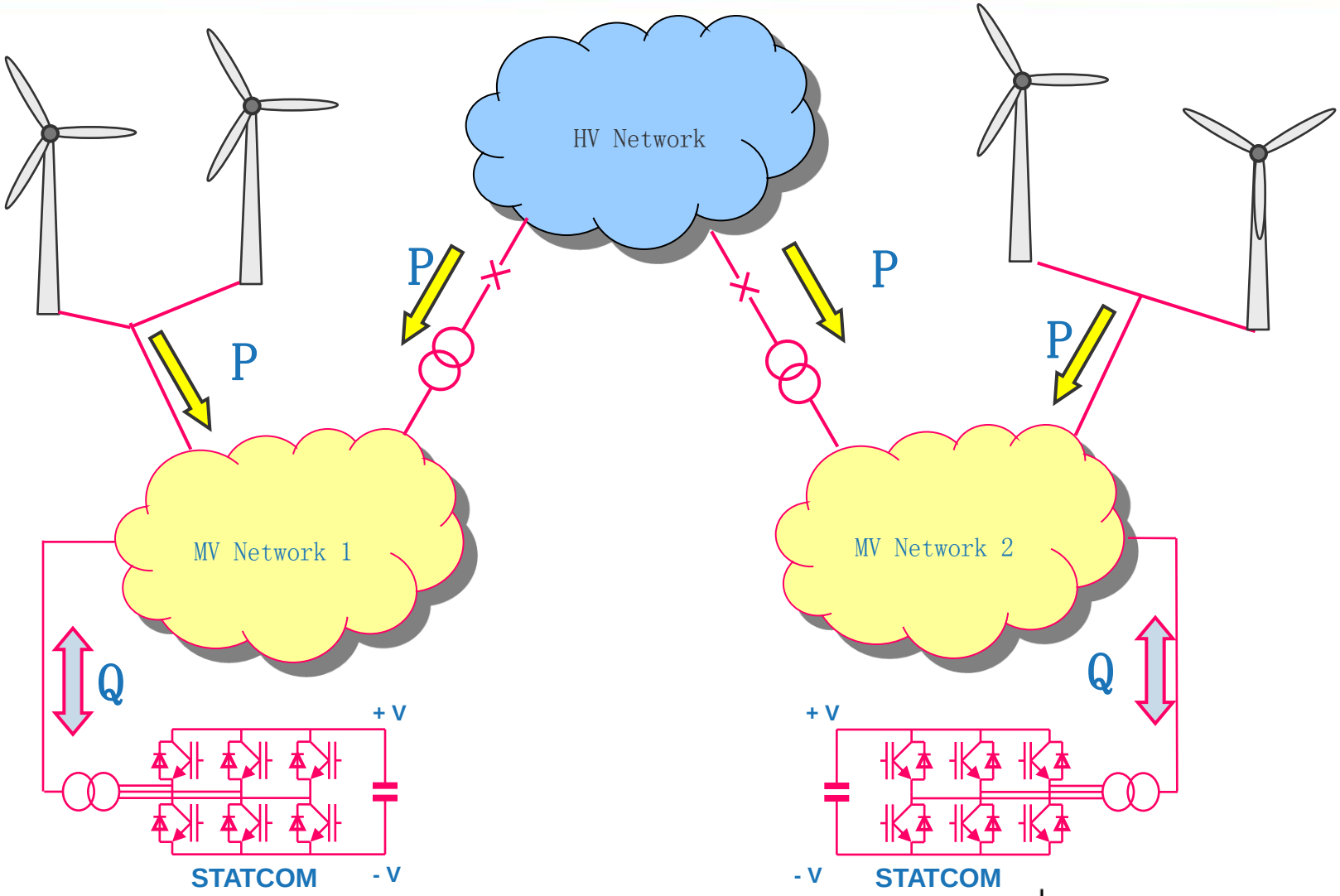
Generation and Load Demand Balance



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Alstom Software on this project

Distribution Management System Software (DMS)

Power System Simulator Software (DTS)

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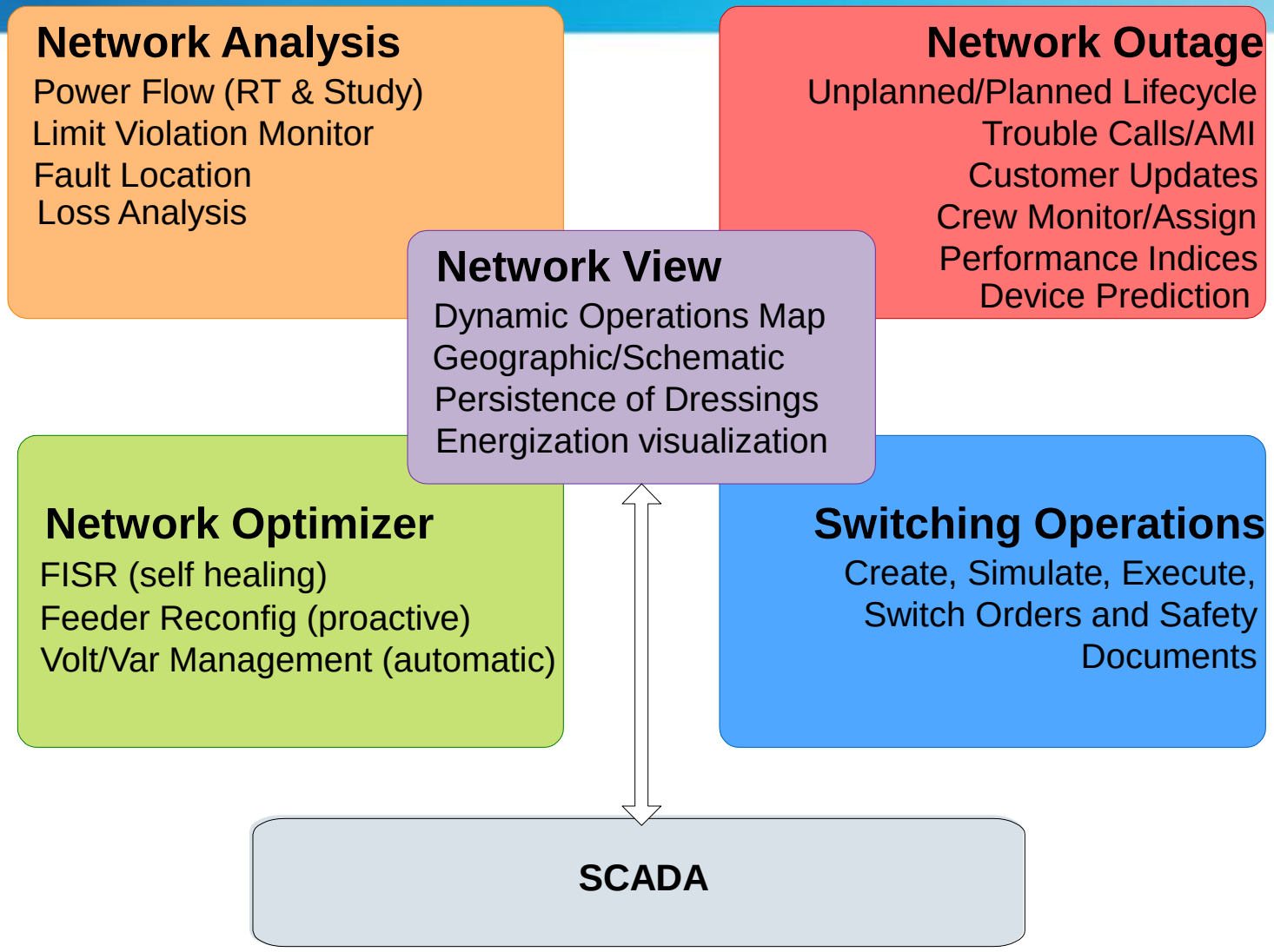
DMS Functions - 3-phase Unbalanced



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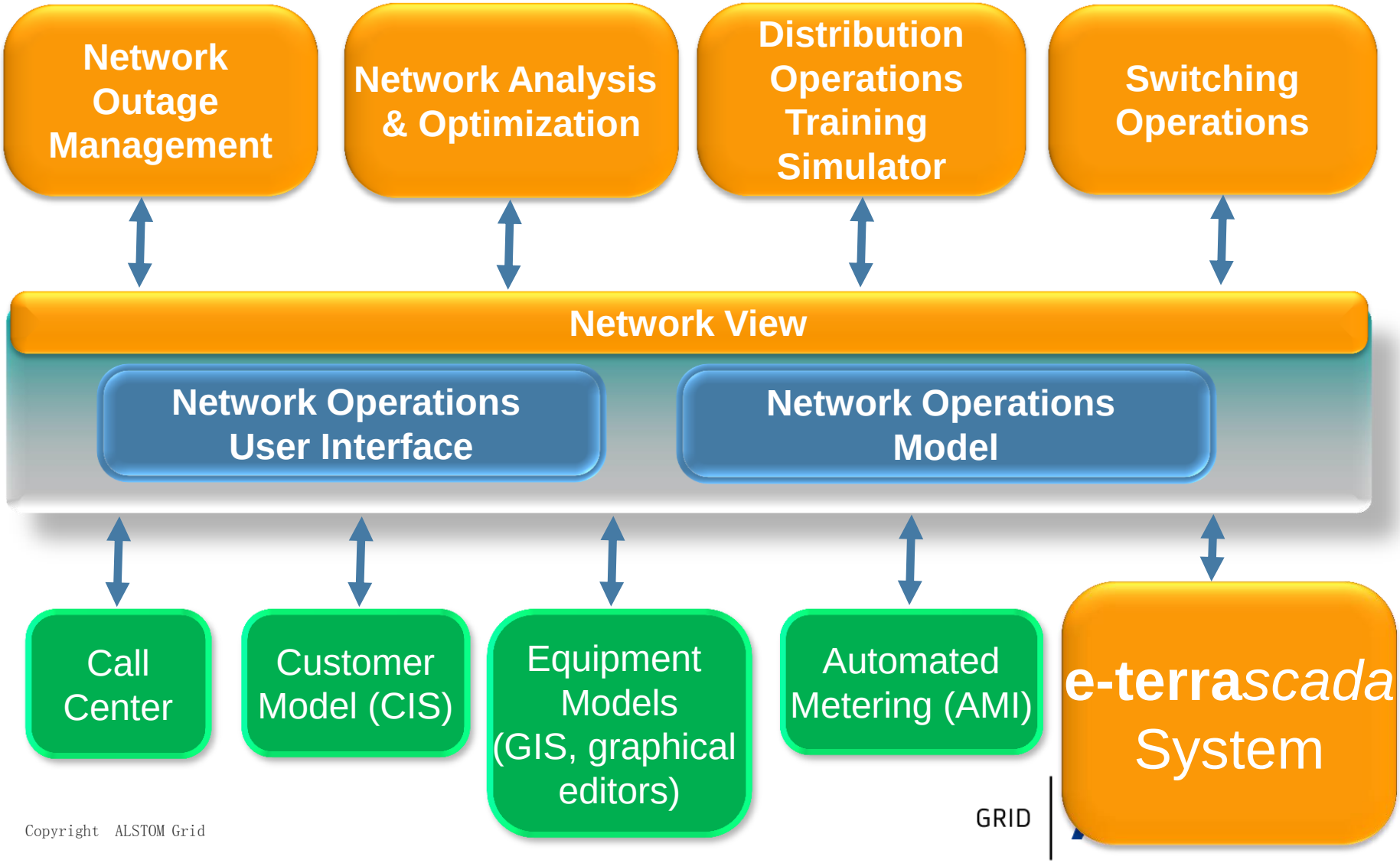
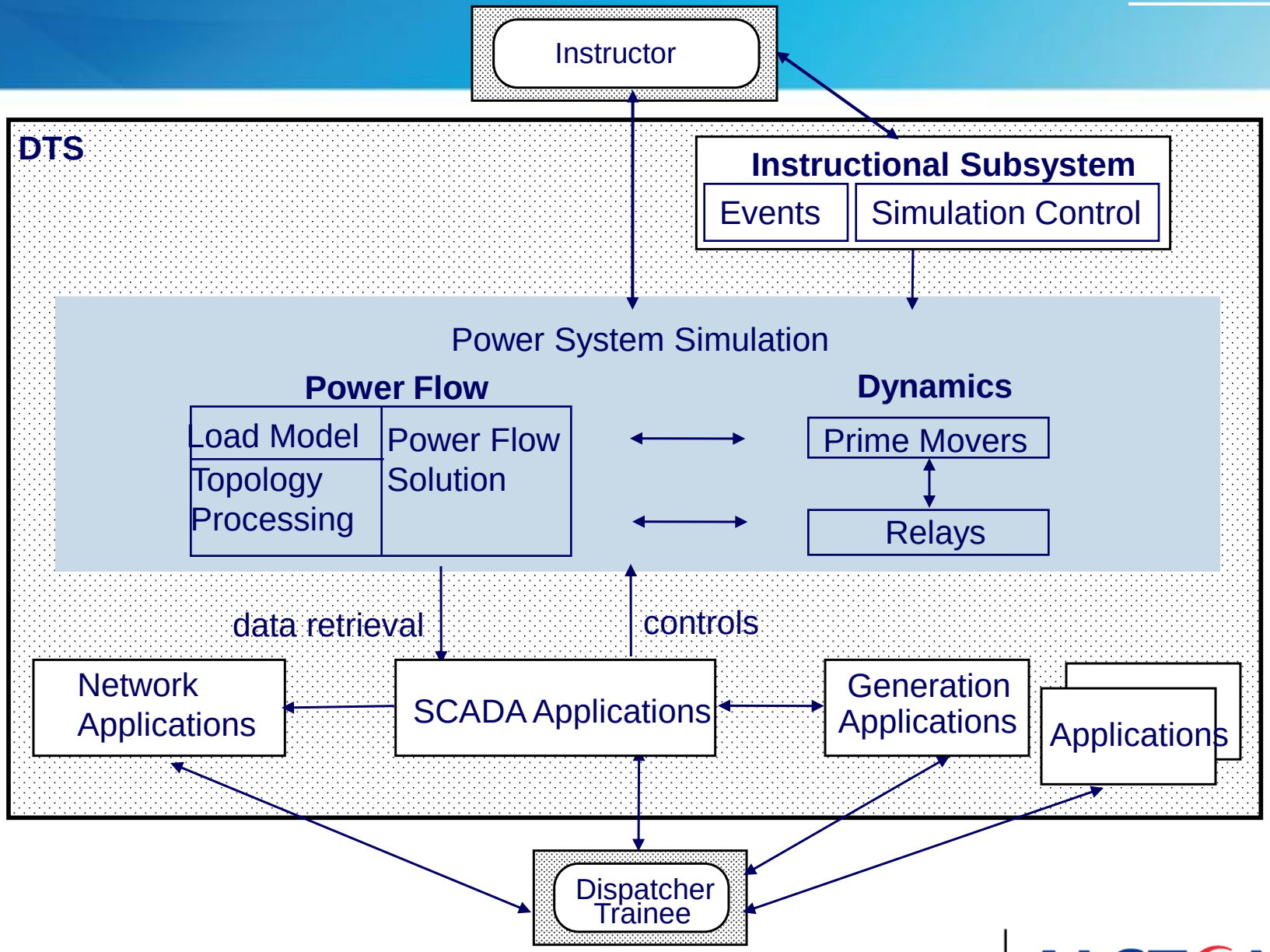
DMS Subsystems



DTS - HV Transmission System Simulator



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Backup Slides

More details

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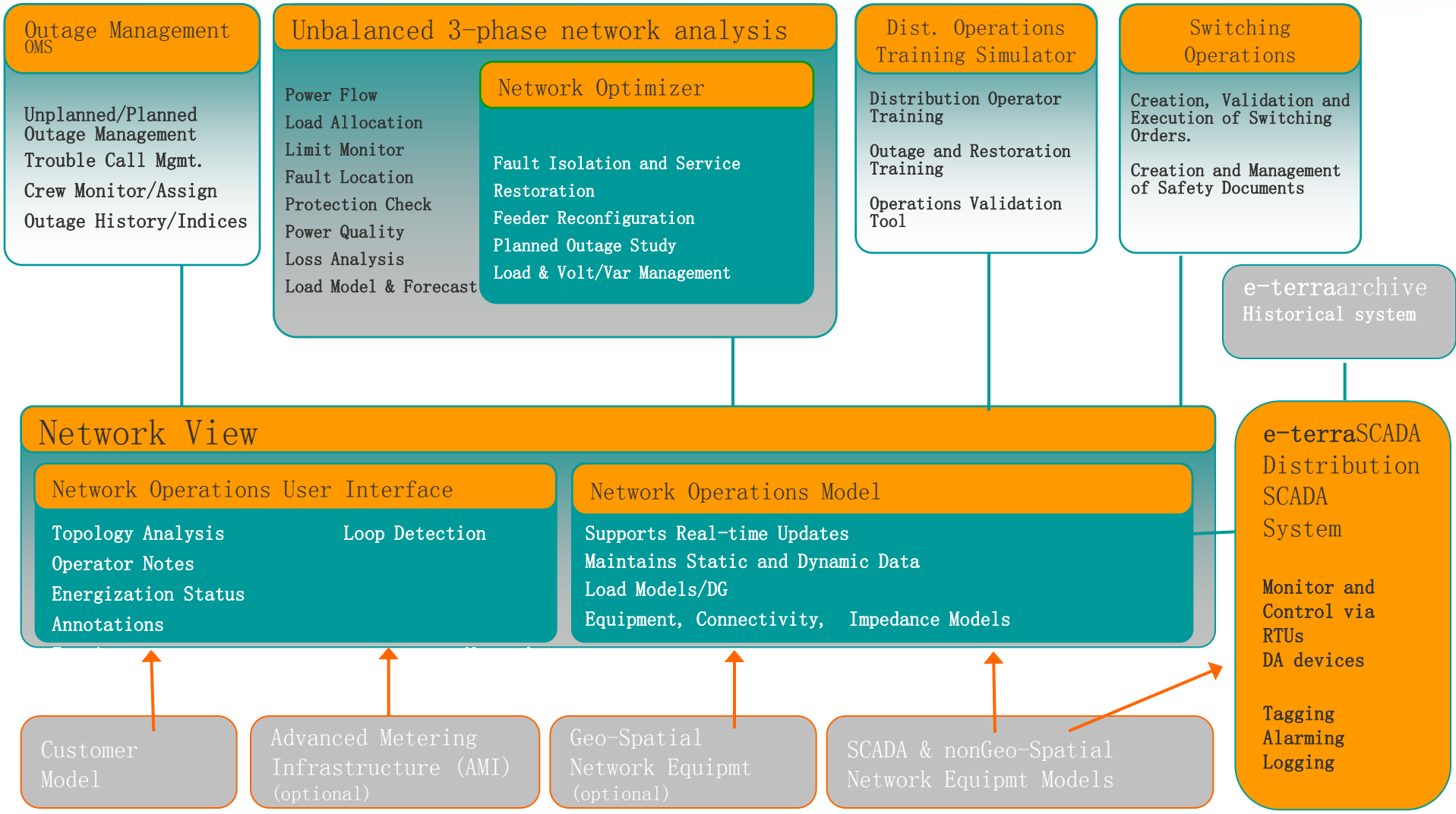
e-terra*distribution* - Distribution System Analysis



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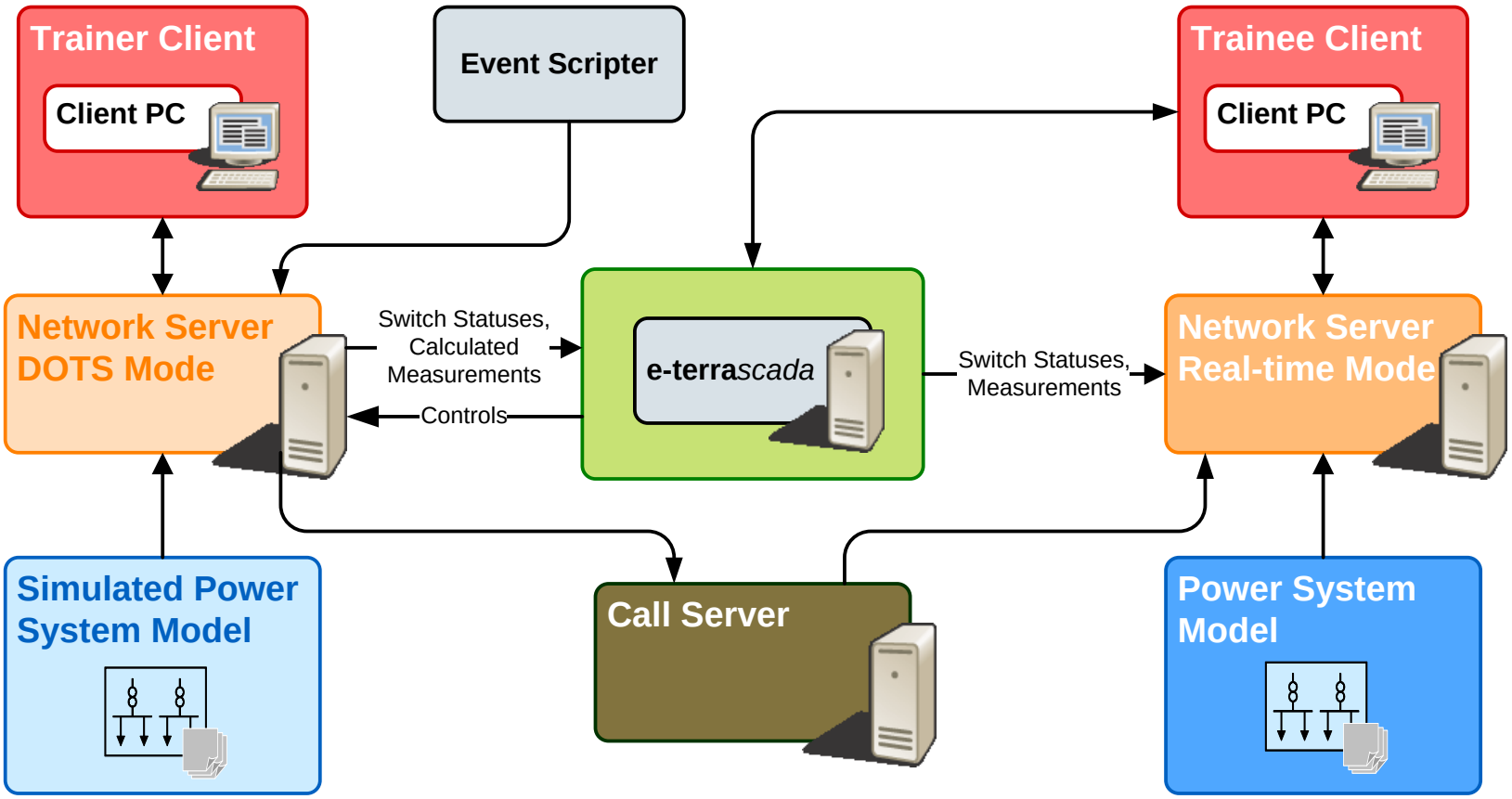
Distribution Operator Training Simulator Data Flow



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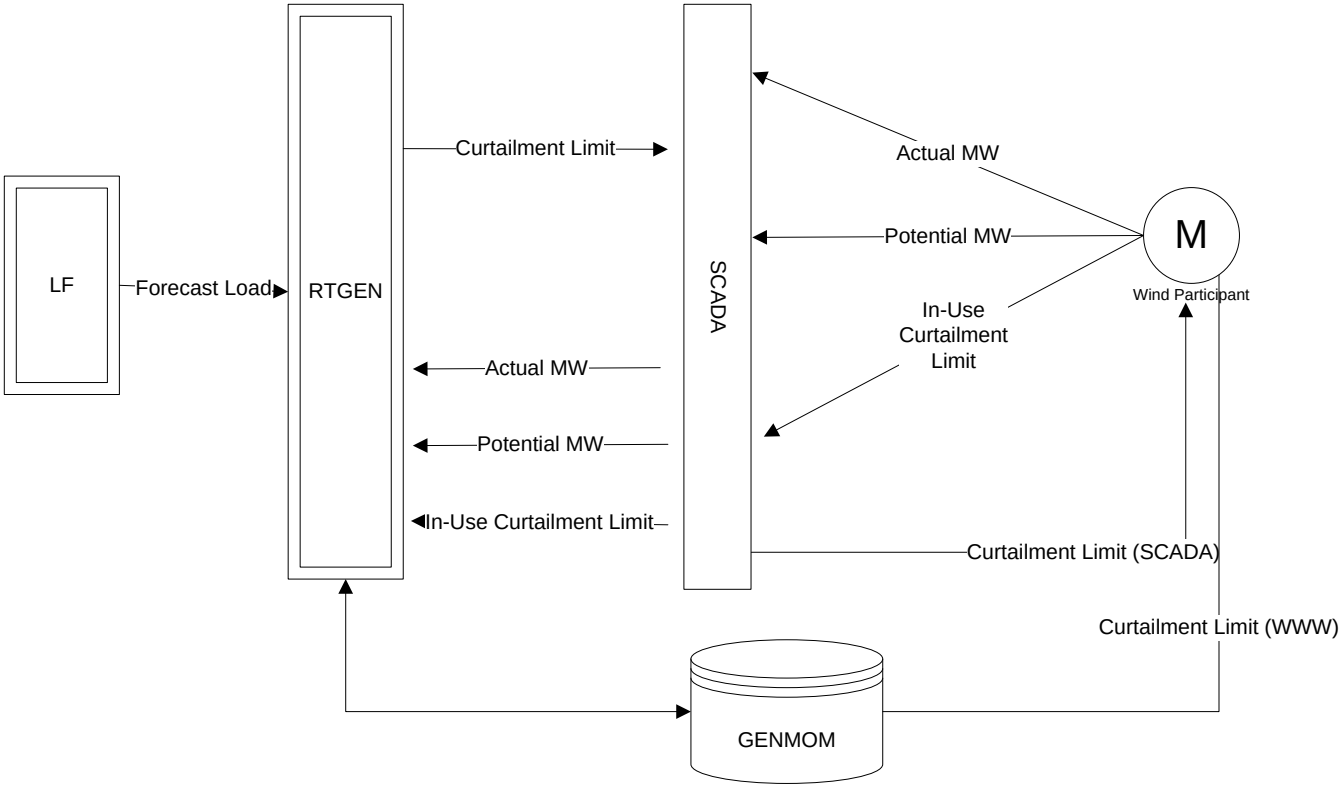
Wind Power Ramp Management using e-terra*simulator* – a project example

Realtime Data Flow



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