Strategic PMU Placement for Secure and Resilient Power Grids

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Introduction

- Power Grids delivers power from generators to loads
- **Phasor Measurement Units (PMU)** measure voltage and current

Objectives

- Minimize total cost
- Maximize Observability
- Accounting for CN and ZIBs

Methods

1. Integer Linear Programming (ILP) - GAMS
2. IEEE- bus systems - MATPOWER

Results

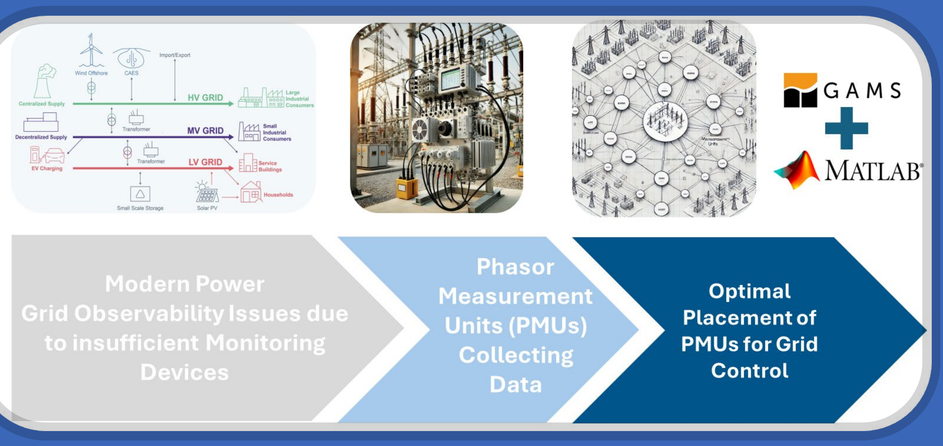
- IEEE – 30: $N_{PMU} = 8$
- IEEE – 57: $N_{PMU} = 13$
- IEEE – 118: $N_{PMU} = 31$

The Electric Grid's **Secret Eyes**: How **Strategic PMU* Placement** Transforms **Grid Awareness**

***PMU: Phasor Measurement Unit**

SCAN ME

For more **details** about this work!!



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Results