

Supplementary Information

Multi-resource Dynamic Coordinated Planning of Flexible Distribution Network

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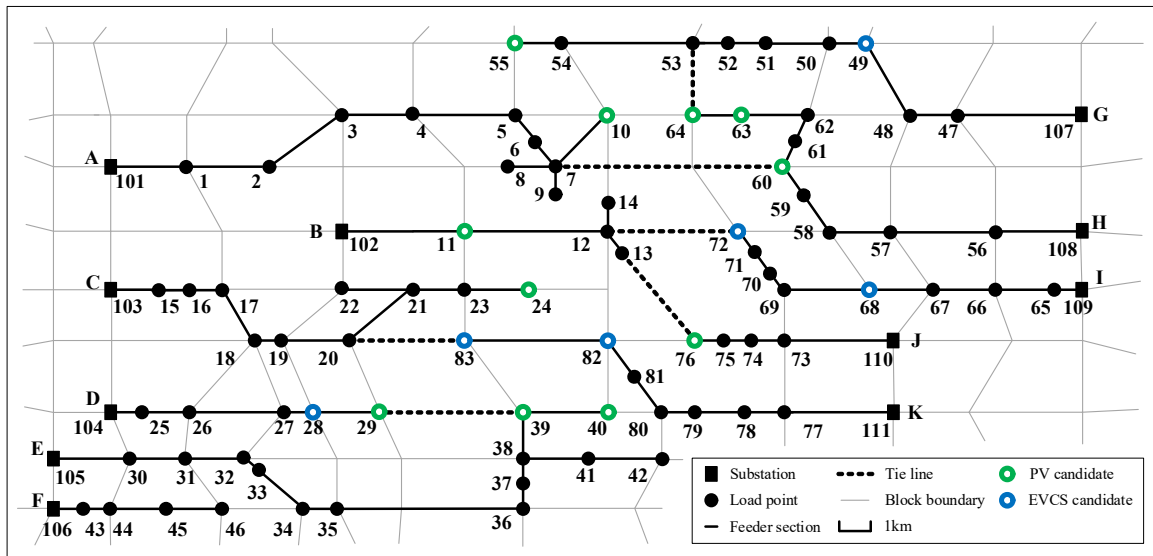
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Supplementary Tables

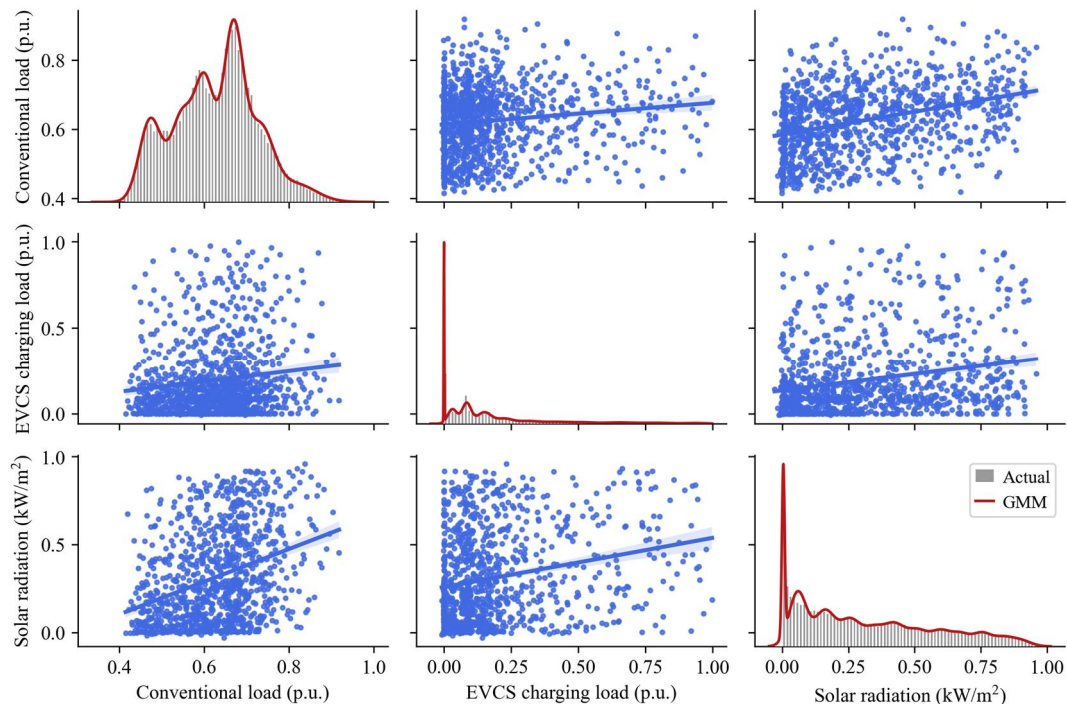
Supplementary Table 1. Price associated with planning

Stage	I	II	III	IV
Transformer investment (10^3 CNY/kVA)	0.5	0.4	0.35	0.3
Storage battery investment (10^3 CNY/kWh)	1.0	0.8	0.5	0.3
Converter investment (10^3 CNY/kVA)	0.8	0.6	0.4	0.2
Land exploitation (10^6 CNY)	3.0	3.5	4.0	5.0
Line construction (10^6 CNY/km)	0.1	0.12	0.16	0.2
Electricity purchase (CNY/kWh)	0.35	0.3	0.25	0.2

Supplementary Figures



Supplementary Fig. 1. Structure of the practical distribution network. The structure of the distribution network is typically multi-sectioned in design and radial in operation. Candidate nodes for planning EVCS (blue hollow dot) and PV (green hollow dot) can be determined by referring to their geographical, lighting, and economic conditions.



Supplementary Fig. 2. Uncertainty quantification. The univariate probability distributions established by Gaussian mixture models (dark red lines) can effectively reflect the actual probabilistic characteristics (grey histograms) of the sources and loads in FDNs. The pairwise correlations (blue scatters) between different types of uncertainties are handled based on Nataf transformation, as illustrated at the non-diagonal positions of the image.