

Tapestry: Moonshot for the Electric Grid

PANEL DISCUSSION AT THE ARTIFICIAL INTELLIGENCE-RELATED DATA CENTER ELECTRICITY USE AND EMISSIONS WORKSHOP
NATIONAL ACADEMIES OF SCIENCES ENGINEERING AND MEDICINE

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How do we meet the challenges and opportunities of Data Center load growth and renewables

- **Holistic approach.** Grid Management, Planning and Operations have to be addressed holistically
- **AI.** We need new tools that leverage AI, data integration and software innovation
- **Collaborative Partnerships.** Example: Our tool for grid planning, for the country of Chile

Questions: How can we

- Move beyond data to insights and collaboration?
- Evolve to a grid architecture that facilitates secure collaboration across silos and boundaries?



Tapestry is the only end-to-end solution for grid management, planning, and operations.

We leverage AI to revolutionize the grid for the future.

GRID INTELLIGENCE

GridAware



Highly accurate grid models
to manage assets and predict how they will behave from milliseconds to years into the future.

GRID PLANNING

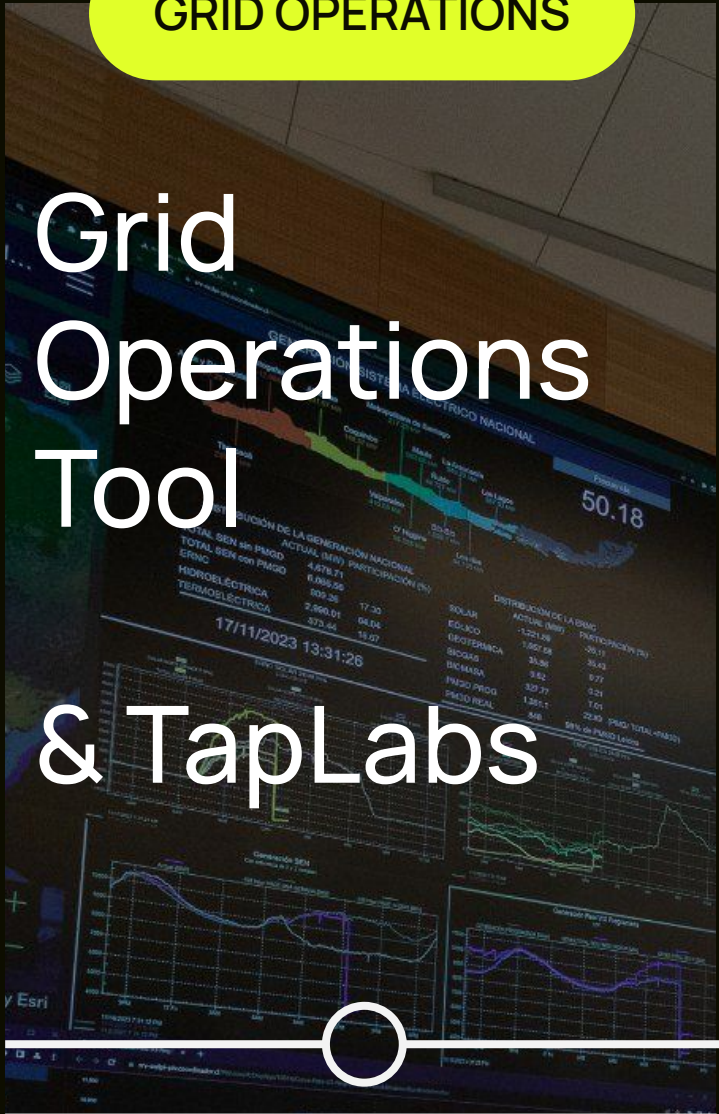
Grid Planning Tool



Advanced planning tools
to accelerate the decarbonisation of the grid and the electrification of economies.

GRID OPERATIONS

Grid Operations Tool & TapLabs



Operations Tool
optimize the dispatch of clean and renewable power sources.

R&D
to unlock the next game-changing feature for a greener, more reliable grid.

Fast-tracking decarbonization in Chile

FASTER

86% faster
From 120 hours to
16 hours for 10 PLP runs.

GPT-T All studies Canonical Study PET2024 Baseline PET2024 HighDemand-GenLora

Congestion & Spot Price Full study 1 year All Day Night Median

Simulation summary Compare

Probability of congestion (all hydrologies)

Name	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
Tocopilla220->El Loa220	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.4%	0.9%	2.0%	1.6%	2.7%	4.0%	6.5%	4.6%	6.0%	6.5%	8.4%
Crucero220->Kima220	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	13.7%	17.0%	20.9%	23.8%	25.0%	29.6%	30.8%	32.6%	31.9%	32.7%	34.2%	35.1%	
Encuentro220->Kima220	6.6%	14.5%	9.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.9%
NvaChugucamata220->Kima220	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	25.1%	42.7%	44.7%	45.8%	45.7%	46.0%	46.1%	45.5%	45.7%	45.6%	44.9%	46.3%	46.3%
El Loa220->Kima220	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.8%	3.6%	3.4%	4.5%
Encuentro220->NuevaCentinela220	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.0%	2.6%	4.9%	6.2%	7.8%	10.9%	12.3%	12.5%	16.2%	16.6%	16.7%	19.7%	18.5%
Parinas500->LosChangos500	0.0%	0.7%	0.0%	0.0%	0.4%	2.2%	1.0%	2.9%	5.8%	8.2%	8.7%	16.9%	20.5%	17.6%	18.4%	18.5%	17.1%	30.4%	34.9%
Andes220->NuevaZaldívar220	28.7%	34.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Andes220->Likanantai220	0.0%	0.0%	1.1%	0.1%	1.1%	3.0%	12.2%	17.9%	20.1%	21.7%	23.1%	10.5%	10.3%	11.1%	10.0%	9.2%	9.0%	8.2%	1.2%
Likanantai220->NuevaZaldívar220	0.0%	0.0%	80.7%	77.0%	23.6%	0.0%	0.1%	0.6%	1.8%	2.5%	2.4%	6.6%	10.5%	15.0%	23.0%	28.1%	32.6%	35.8%	34.1%

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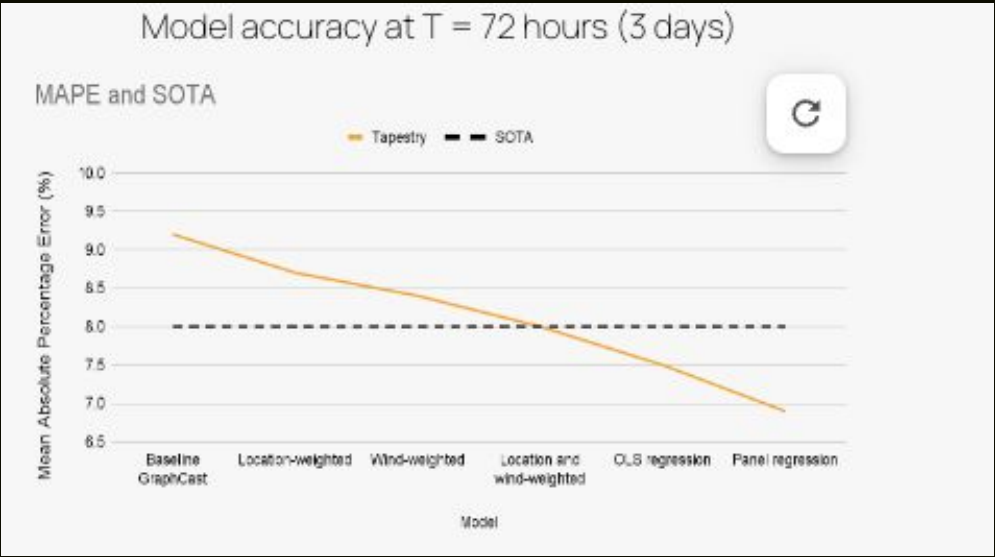
EASIER

30x scenarios
From one scenario at
a time to 30 in parallel.



SMARTER

AI-powered
forecasting
19% more accurate
wind forecasting than
industry standard.



Collaboration with Google DeepMind