ENELYTIX®
powered by PSO

ENELYTIX®, a SaaS solution for production cost modeling

ENELYTIX is an energy systems and markets modeling and analytics environment addressing the needs of stakeholders at a level of rigor, speed and efficiency not attainable with competing tools. It integrates a best-in-class power-system simulation engine with data services, scalable, distributed on-demand compute resources, and state-of-the-art business analytics tools.
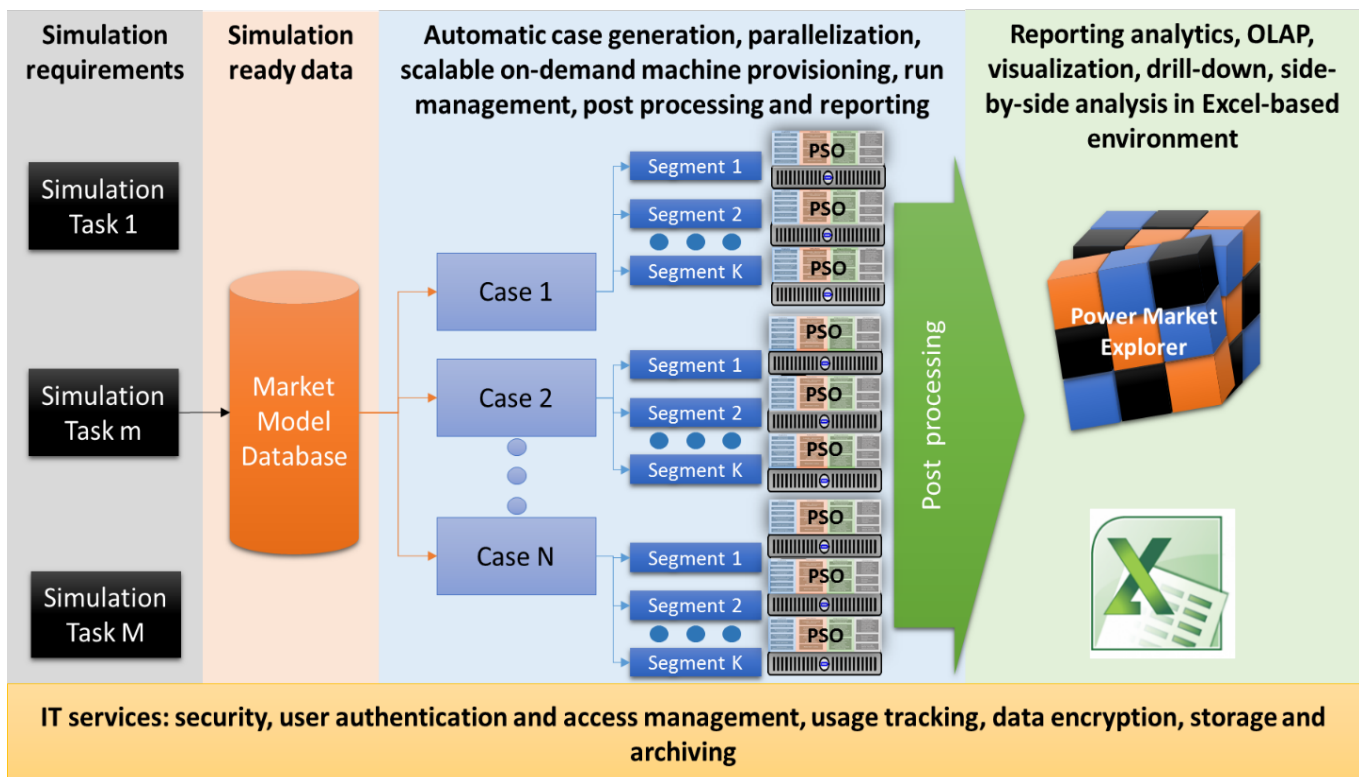
Developed by industry experts, ENELYTIX delivers an advanced, highly scalable energy market forecasting, system planning and analysis tool for

- Resource adequacy planning
- Emission policy and RPS compliance planning and evaluation
- Security-constraint unit commitment and economic dispatch (SCUC/SCED)
- Energy and ancillary services co-optimization
- Co-optimized transmission topology control
- Gas-electric co-optimization

The ENELYTIX® SaaS

ENELYTIX's key services incorporate the full business cycle of a modeling project.

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ENELYTIX provides users with a one-click experience for power market simulation, generating necessary inputs, provisioning compute resources and post processing results. It comes embedded with a range of services for data security, user authentication, usage tracking, self-service business intelligence and data storage and archiving.

PSO: The ENELYTIX® Engine

The ENELYTIX engine, Power System Optimizer (PSO), is an advanced expansion and production cost optimization and simulation tool that accurately captures the uncertainty and dynamics of planning decisions and their impact on the physics and economics of power system operations. PSO structure provide users the versatility and flexibility to accurately replicate the rules and operations of structured power markets and vertically integrated, regulated power systems.
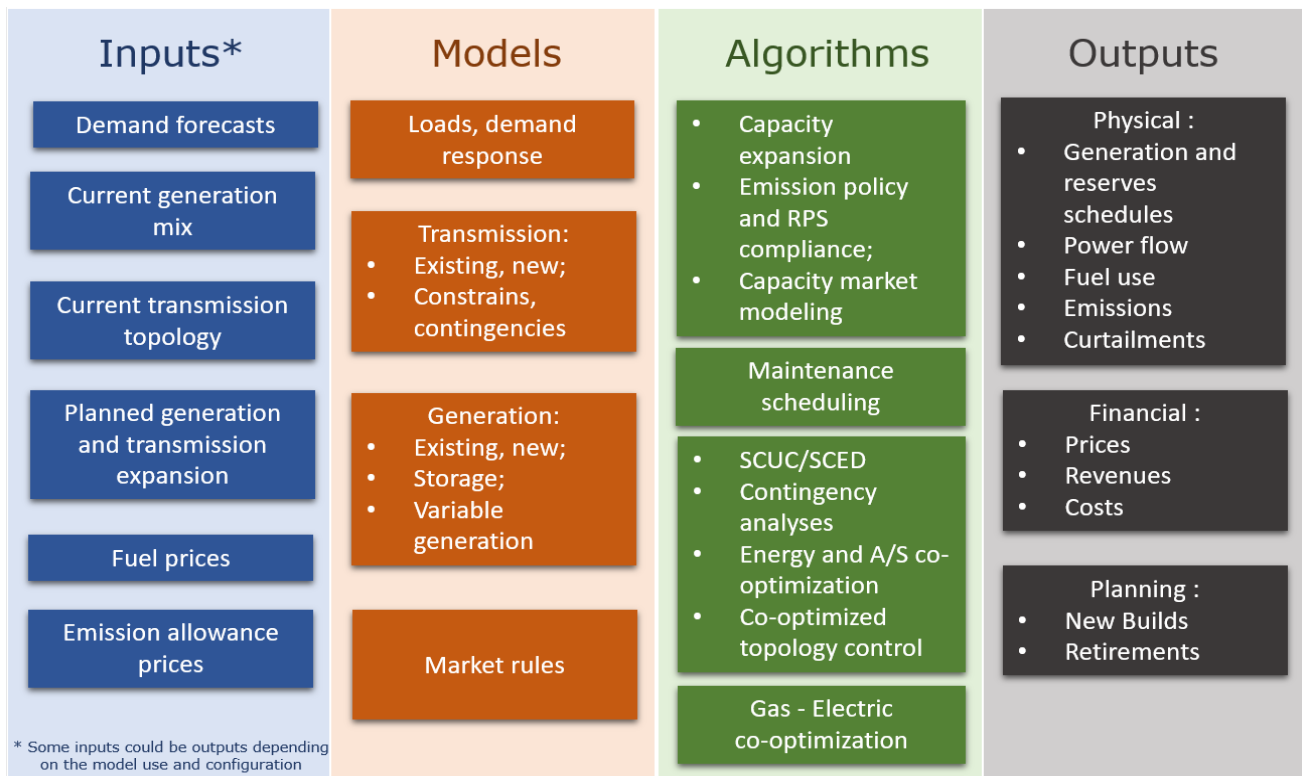
Inputs*	Models	Algorithms	Outputs
Demand forecasts	Loads, demand response	• Capacity expansion • Emission policy and RPS compliance; • Capacity market modeling	Physical : • Generation and reserves schedules • Power flow • Fuel use • Emissions • Curtailments
Current generation mix	Transmission: • Existing, new; • Constrains, contingencies	Maintenance scheduling	
Current transmission topology		• SCUC/SCED • Contingency analyses • Energy and A/S co-optimization • Co-optimized topology control	Financial : • Prices • Revenues • Costs
Planned generation and transmission expansion	Generation: • Existing, new; • Storage; • Variable generation		
Fuel prices			Planning : • New Builds • Retirements
Emission allowance prices	Market rules	Gas - Electric co-optimization	

* Some inputs could be outputs depending on the model use and configuration

Figure. Schematics of the ENELYTIX engine

Contact Information

For more information about ENELYTIX or to schedule a demo, visit http://www.enelytix.com or contact us at info@enelytix.com