

Distributed Energy Resource Evaluation and Planning

Today's power grid and the utility business model are evolving rapidly as distributed energy resources (DERs) allow all types of consumers to manage and supply their own energy needs. Technologies and new entrants are changing the traditional role of the utility and a new approach to customer service and utility investment is needed. As DERs, such as solar and battery storage, continue to grow, distribution utilities will no longer only manage the one-way delivery of wholesale energy, but multiple flows in and out of their system from DERs owned by their customers. Utilities need to have a strategy and plan in place to respond to changing customer needs, threats from substitute products, and to maintain a reliable and resilient system. EnerVision's DER evaluation and planning service helps utilities respond to these challenges and identify a plan to capture the opportunities presented by DERs and the changing needs of their customers.



EnerVision works with utilities to develop a DER strategy that incorporates aspects of their business, operations, and member services functions to evaluate, design and implement DER programs that are beneficial to the utility and their members/customers. Using EnerVision's DER optimization model, a utility can determine viable, cost-effective DER solutions to help mitigate energy and demand costs, increase customer participation, defer transmission and distribution investment, or improve the overall visibility and contribution of DERs to the grid and utility operations.



DER EVALUATION PROCESS

Build initial model inputs

- · Send out information request and collect data
- Scrub data and refine inputs

Run DER optimization model

- Perform baseline analysis
- Verify results and refine inputs
- Perform multiple iterations

Conduct data analysis

- Query results & perform regression analysis
- Set program criteria based on results

Perform cost-benefit analysis

- Individual CBA and break-even analysis on DER technologies and programs
- Prepare report

Provide on-site customer workshop

Walk through program design and implementation





EnerVision's DER Model Defines Program Potential

