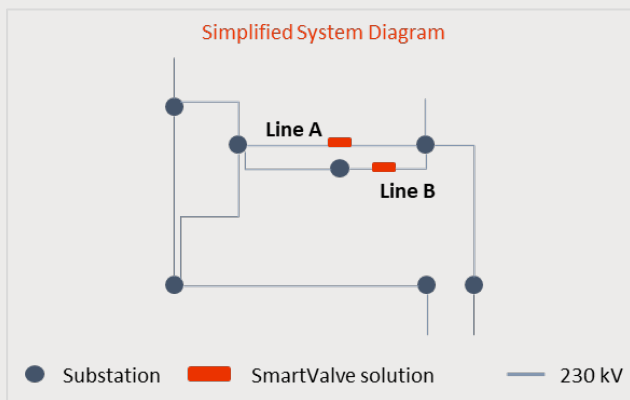


# MITIGATE GRID UNCERTAINTY WITH FLEXIBLE SOLUTIONS

Today's grid has become extremely challenging to manage due to a rapidly changing generation mix, evolving power consumption patterns and public resistance to new construction projects. The traditional planning process of forecasting problems 5-10 years in the future and using conventional tools to solve known and stable problems is no longer the reality for most utilities. Smart Wires modular power flow control solutions are quick to install, easy to redeploy and provide the flexibility needed in today's uncertain landscape.



Scenario	Line A		Line B	
	Loading %	# SmartValves	Loading %	# SmartValves
2019 Peak	106	33	98	0
2022 Peak	109	45	101	9
2027 Peak	113	60	103	18

## CHALLENGE

- A reliability assessment identified that without sufficient local generation, thermal overloads will occur and increase from 2019 through 2027 in several different study scenarios.
- The exact magnitude and timing of the overload is highly uncertain and it is quite possible the full extent of the overload condition may never occur.
- Worst-case planning would lead the utility to pursue a \$125 M reconductoring project.

## SOLUTION

- The utility developed a solution involving two multi-staged SmartValve™ deployments that resolve the anticipated thermal overloads.
- This solution allows the utility to solve the known near-term need and can be scaled up (by adding additional devices) if the need grows in the future.

## IMPACT

- This modular solution can be installed in less than a year. This ensures the utility addresses the near-term reliability violation and allows them to quickly procure additional power flow control in the future.
- SmartValve deployments are a cost-effective option that provides considerable savings to customers by deferring high-cost reconductoring.
- If the utility decides to pursue the reconductor project in the future, the SmartValve devices are a “no regrets” investment that can be easily redeployed elsewhere on the grid, including onto lines of a different voltage class.