Faced with growing energy demands, utilities are building more efficient and intelligent systems. Substations play a big part in ensuring that the grid meets these ever-growing energy demands.

Black & Veatch’s experience in deploying both the physical and digital infrastructure for substations gives you flexible, proven solutions, regardless of project size or technology.

We provide planning, configuration, siting and permitting services for all types of substations. Our design, construction and commissioning services ensure optimum performance.

**FLEXIBLE SOLUTIONS FOR MULTIPLE SYSTEMS**
We’ve successfully designed and constructed substations that include a wide variety of bus configurations and voltage levels. These range from 4 kilovolts (kV) for distribution substations through 500 kV class transmission switching stations and switchyards, including those that ensure reliable electric system operation at generation facilities.
Black & Veatch can help you with:

**Air-insulated substations**
We can conceptualize, plan, site, design, procure and construct any air-insulated substation configuration in the industry today, including current communication and smart grid technology. Our experience serving as engineer and as engineering, procurement and construction (EPC) contractor allows us to anticipate challenges and propose technically sound and economically viable alternatives.

**Gas-insulated substations (GIS)**
Because of the large size of some new air-insulated substations, our creative GIS solutions often provide the best alternative when considering the environment, cost and aesthetics. Our seasoned professionals specialize in GIS design and construction and blending facilities into the surrounding locale.

**Substation upgrades and retrofits**
Upgrading or retrofitting existing facilities with new technologies can meet operational demands while maintaining the original substation footprint. We deliver solutions that eliminate additional right-of-way acquisition and provide you with lower cost options.

**Substation automation and integration**
Intelligent automation technology gives utilities better monitoring and control, while ensuring efficient and reliable transmission and distribution networks. Black & Veatch can design and deploy the latest technology for substation automation and supervisory control and data acquisition (SCADA) for more efficient, secure and intelligent systems.