

SERVICE FEATURE / **AN INNOVATIVE SOLUTION**

## MODULAR SUBSTATIONS PROVIDE ADAPTABLE APPROACH

Across the transmission and distribution industry, identifying the right solution is often dependent on schedule and load/generation constraints needed to meet demand. Modular substations can provide an alternative to permanent and mobile substations to meet your unique needs.



# BUILDING THE RIGHT SOLUTION

Modular substations are designed as a quickly deployable, cost-effective new connection solution. The unit design for fully mobile solutions, on the other hand, is often expensive, has overall design and transport constraints, and doesn't work well as permanent solutions due to the design and construction techniques used. Alternatively, permanent, stick-built substations require significant field construction time and have limited flexibility to scale with load/generation growth, resulting in a restricted ability to redeploy equipment while controlling costs.

A modular substation has a variety of benefits for utilities, municipalities, renewables developers, oil and gas clients, and others looking to implement a flexible solution. Utilising premanufactured and assembled

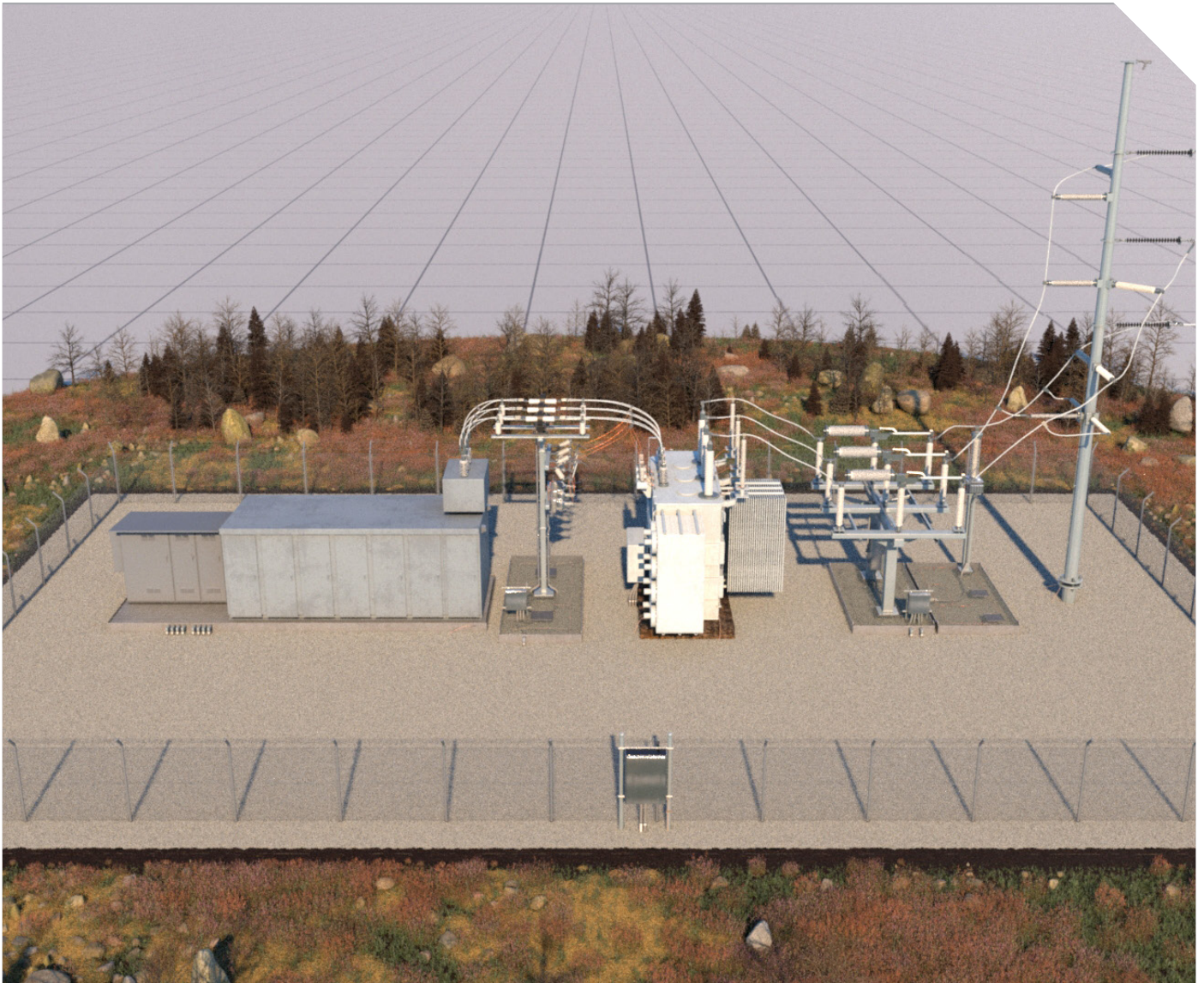
equipment with minimal foundation work, a modular substation can be quickly assembled and easily deployed for a reduced construction schedule. Additionally, safety hazards are minimised as the team spends less time in the field constructing necessary units, which can be difficult amid adverse weather conditions. With an expedited schedule and our team's ability to procure items in a cost-efficient manner through strategic supplier relations, modular substations provide highly competitive installation costs.

The flexibility of modular substations increases by leveraging skid-mounted solutions that transport the assets on movable platforms to meet high-voltage connection needs and energy demands with a reduced project delivery schedule. The solution's

ability to scale up and down pairs especially well with renewable energy projects that demand high-voltage connection capabilities and the ability to adapt to fluctuating demand. Load changes can spike and dip, whether due to an ongoing pandemic disrupting residential power needs or with an increasing move to the renewables space.

Most of a modular substation's equipment can be relocated to a new project site — creating an adaptable solution that reduces abandoned costs and allows for longer asset life spans. Bays can be added to support future energy demands, whether that load changes due to fluctuating residential patterns or an increased need for solar and wind power, to provide reliable service for both residents and businesses.





With movable assets that can easily be deployed from site to site allowing for project relocation, modular substations offer flexible and scalable solutions to meet unique needs.

Modular substations are designed and manufactured to adapt to fluctuating demand and accommodate unique connection requirements. With integrated engineering,

procurement and construction specialists well-versed in overcoming challenges, our team has the experience and capability to take your modular substation from start to finish.

## THE BURNS & McDONNELL DIFFERENCE

True partnerships lead to successful projects. At Burns & McDonnell, we dedicate experienced and innovative leaders to your work, beyond the specific needs of a particular job and always with safety in mind. We build long-term relationships

as our people — engineers, architects, construction professionals, scientists and more — become valued extensions of your own teams, often for decades at a time. It's a point of pride that our clients find it difficult to tell the difference between a

Burns & McDonnell employee and one of their own. And that's no surprise, considering that we, as employee-owners, carry the commitment of ownership: We succeed when you do.

Learn more at [burnsmcd.com](https://burnsmcd.com).



**BURNS  MCDONNELL**

*burnsmcd.com | Offices Worldwide*