



NR Leading FACTS Solutions

Towards A More Flexible and Stable Power Grid



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NR FACTS Solutions

With more than 700 sets of FACTS projects worldwide, NR Electric as the world leading supplier is helping improve the flexibility and stability of the power network operator which are facing challenges such as frequency stability, voltage stability and network congestion, etc.

Tendency in Power System Operation

- Phase out of conventional synchronous generations
- High ratio of renewable generations
- Increasing power demand in existing power network

Grid Stability Challenges

- Reduced grid strength and frequency stability
- Reduced voltage stability
- Increased unbalanced power flows and congestion

Highlights of NR FACTS Worldwide Reference

- Suzhou 500kV UPFC: the largest capacity UPFC in the world
- Peru 500kV DPFC: the world first 500KV DPFC
- Indonesia 500kV FCL: the first 500 KV FCL using fast switch
- Jiling SSC: the world first GFM STATCOM using super-capacitor
- Ethiopia SVC: one of the world largest capacity SVC (900Mvar)
- Saudi STATCOM: 40 STATCOM total capacity 2730Mvar

STATCOM Reference

GuanYinyan 500kV/±200MVar STATCOM Project in China



Fonderia Steel Plant ±120MVar STATCOM Project in Mexico



150kV/±60MVar STATCOM Project in Greece



Suzhou 500kV UPFC

500kV/250MVA UPFC Project in China



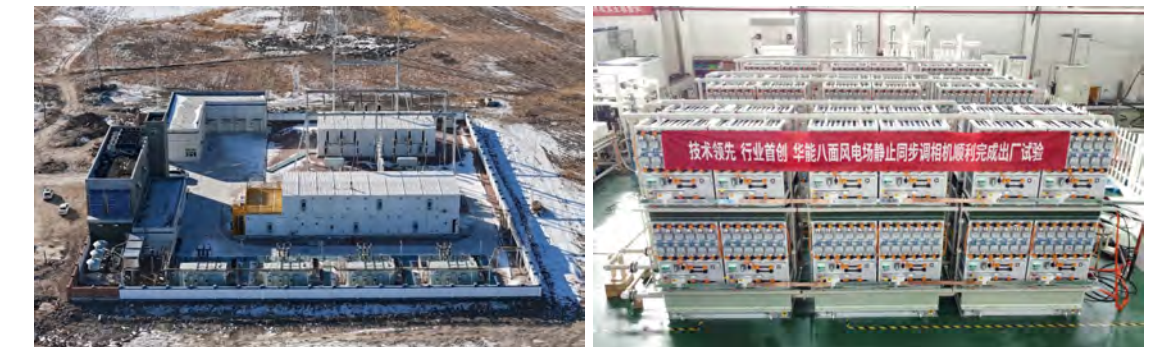
Huzhou 220kV DPFC

220kV/30MVar DPFC Project in China



Jilin 50MVar SSC

35kV/50MVar/340MJ SSC(Static Synchronous Condenser) Project in China



Indonesia 500kV FCL

500kV FCL Based on Fast Switch Project in Indonesia

