

## Sino-Singapore Tianjin Eco-City, Smart Grid, Smart City

### Abstract:

The construction theme of “environmental protection, energy conservation, green building” of Sino-Singapore Tianjin Eco-City is consistent with the idea of strong smart grid, which determines Sino-Singapore Tianjin eco-city smart grid integrated demonstration project is the second smart grid demonstration projects of State Grid.

Sino-Singapore Tianjin eco-city smart grid integrated demonstration project follows the eco-city “practical, replicable and scalable ”planning ideas, from the power flow, information flow, business flow, in accordance with the "6 areas, 12 projects, " designed eight information systems, built a safe, reliable, high quality, clean, efficient , interactive and sustainable energy supply and service system.

This paper introduces the construction background, objectives, ideas, principles, general framework and sub-item of the project. Then the characteristics of the project are summarized. Micro grid control system, visualization platform, user energy management, distribution integration, software and hardware integration are achieved innovation and breakthroughs. And the construction and operation technical standards of smart grid are established, which can be referenced for the construction of smart grid on regional city.

To sum up, Sino-Singapore Tianjin eco-city smart grid integrated demonstration project is a demonstration pilot project, which is strict accordance with the principle “unified planning, unified standards and building”. The project is also “practical, replicable and scalable”. And it can be said “the smart grid provides energy supplying platform for the smart city”.