The Possible Application of HTS for Future DC Power Grid

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Abstract — With the quick development of renewable energies, it is suggested the DC power grid should be developed to transport the renewable energies. For the DC power grid, HTS would be possibly used for energy pipeline to transport electricity and liquid natural gas, and used for DC fault current limiter and DC power transformer. In this presentation, we would discuss these possible applications.

Keywords (Index Terms) — Power grid, DC, cable, fault current limiter, transformer, liquid natural gas.