Supporting Information

Liquefied Natural Gas for Superconducting Energy Pipeline: Feasibility Study on Electrical Insulation

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The experimental prototype is the 10 kV/1 kA superconducting energy pipeline with a length of 10 m [1, 2]. The critical current of the prototype is 885 A at 100 K, and the transport rate of LNG is more than 15 L/min [1]. Unfortunately, it uses LN_2/LCF_4 mixed liquid as main insulation medium, instead of LNG. Figure S1 is the scene of the LNG test. We are conducting final commissioning before LNG breakdown and flashover tests.

Figure S1. The scene of LNG breakdown and flashover test.

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(2) Chen, J. H.; Zhang, G. M.; Sang, W. J.; Wang, Y. H.; Zhang, C. S.; Zhao, Y. X.; Qiu, Q. Q.; Teng, Y. P.; Jing, L. W. Electrical Insulation Characteristics of LN_2/CF_4 Mixture at Cryogenic Temperatures. *IEEE Trans. Appl. Supercond.* **2021**, *31*, 1−6.