

## 154kV, 1GVA 초전도케이블 설계 Design of 154kV, 1GVA HTS Cable

조전욱, 심기덕, 김석호<sup>1</sup>, 이수길, 장현만, 최창열, 이근태<sup>2</sup>, 양병모<sup>3</sup>, 김성래<sup>4</sup>  
Jeonwook Cho, Kiduck Sim, Seokho Kim<sup>1</sup>, Sukil Lee, Hyunman Jang, Changyeol Choi, Kuentae Lee<sup>2</sup>,  
Byeungmo Yang<sup>3</sup>, Seungrae Kim<sup>4</sup>

한국전기연구원, <sup>1</sup> LS전선<sup>2</sup>, 한전전력연구원<sup>3</sup>, CVE<sup>4</sup>  
KERI<sup>1</sup>, LS Cable<sup>2</sup>, KEPRI<sup>3</sup>, CVE<sup>4</sup>

**Abstract :** DAPAS (Development of Advanced Power system by Applied Superconductivity technologies) program that the superconductivity national program has been started one of the 21C frontier programs from 2001 in Korea.

The 3<sup>rd</sup> phase of DAPAS program was started at April 2007, and the ultimate goal of HTS cable project is to develop 154kV, 1GVA class HTS cable.

The structure of 154kV, 1GVA HTS cable is single core with cold dielectric insulation. The cable core consists of the former, conduction layer, electrical insulation layer, shielding layer. The cable cryostat consists of two corrugated seamless aluminum tubes as its high sealing reliability, the tubes separated through a spacer arrangement.

Outdoor termination was developed by LS cable and cryogenic system by CVE for 154kV, 1GVA class HTS cable.

The 154kV, 1GVA HTS cable will be installed and be tested in KEPCO Gochang Testing Center from June 2010.

**Key Words :** superconductivity, HTS Cable, cable core, cryogenic system

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### 참고 문헌

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† 교신저자) 심기덕, e-mail: skedy@keri.re.kr, Tel: 055-280-1659  
주소: 창원시 성주동 28-1 한국전기연구원 초전도연구센터