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**UHV AC transmission systems –
Part 102: General system design**

INTERNATIONAL
ELECTROTECHNICAL
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CONTENTS

FOREWORD.....	6
INTRODUCTION.....	8
1 Scope.....	9
2 Normative references	9
3 Terms and definitions	9
4 Objective and key issues of UHV AC transmission application	9
4.1 Objective	9
4.2 Key application issues	10
5 Required studies on UHV AC system planning and design.....	10
5.1 General.....	10
5.2 Required studies.....	11
5.3 Required analysis tools	11
6 UHV AC system planning.....	13
6.1 General.....	13
6.1.1 Introductory remarks.....	13
6.1.2 Transmission capacity considering routes and line types to use.....	13
6.1.3 Reactive power management issues	13
6.1.4 Environmental issues.....	14
6.2 Scenario for system planning	15
6.3 Scenario for network planning procedure	15
6.3.1 Power transmission capacity.....	15
6.3.2 System voltage	16
6.3.3 Route selection.....	16
6.3.4 Series compensation	17
6.4 Required parameters	17
6.5 Transmission network (topology).....	17
6.6 Reliability.....	18
7 UHV AC system design.....	19
7.1 General.....	19
7.2 Reactive power management.....	19
7.3 Reclosing schemes	19
7.4 Delayed current zero phenomenon.....	21
7.5 Protection and control system	22
7.6 Insulation design (cost effectiveness)	22
Annex A (informative) History of development of UHV AC transmission technologies.....	24
A.1 General.....	24
A.2 History of development in the USA.....	24
A.3 History of development in former USSR and Russia.....	24
A.4 History of development in Italy	24
A.5 History of development in Japan	25
A.6 History of development in China	25
A.7 History of development in India	25
Annex B (informative) Experiences relating to UHV AC transmission development.....	26
B.1 Project development in Italy.....	26
B.1.1 Background (including network development)	26
B.1.2 Demand analysis and scenario of application.....	26

B.1.3	Project overview	26
B.1.4	UHV system planning	27
B.1.5	UHV system design	28
B.1.6	Laboratory and field tests	29
B.2	Project development in China	32
B.2.1	Background	32
B.2.2	Project overview	32
B.2.3	Changzhi-Nanyang-Jingmen UHV AC extension project.....	33
B.2.4	Overvoltage mitigation and insulation coordination	35
B.2.5	Insulation coordination.....	36
B.2.6	Laboratory and field tests	38
B.3	Project development in India	40
B.3.1	Background (including network development)	40
B.3.2	Demand analysis and scenario of application.....	40
B.3.3	Project overview	40
B.3.4	Development of 1 200 kV national test station in India	41
B.3.5	POWERGRID's 1 200 kV transmission system.....	42
B.3.6	UHV AC technology design – Insulation coordination.....	43
B.3.7	Insulation design for substation	44
B.4	Project development in Japan	45
B.4.1	Background (including network development)	45
B.4.2	Demand analysis and scenario of application.....	46
B.4.3	Project overview	46
B.4.4	UHV system planning	47
B.4.5	UHV system design	47
B.4.6	Laboratory and field tests	50
Annex C (informative)	Summary of system technologies specific to UHV AC transmission systems	53
C.1	Technologies used in China	53
C.1.1	Transformer.....	53
C.1.2	UHV shunt reactor and reactive compensation at tertiary side of transformer.....	54
C.1.3	Switchgear	55
C.1.4	Series capacitor (SC)	57
C.1.5	Gas-insulated transmission line (GIL)	59
C.2	Technologies used in India	60
C.2.1	UHV AC transformer	60
C.2.2	Surge arrester	61
C.2.3	Circuit-breakers	62
C.2.4	Instrument transformers.....	63
C.3	Technologies used in Japan.....	64
C.3.1	Switch gear	64
C.3.2	Surge arrester	65
Bibliography.....		67
Figure 1 – Analysis tool by time domain		12
Figure 2 – Flowchart of reactive power compensation configuration.....		14
Figure 3 – π equivalent circuit.....		15
Figure 4 – Four-legged reactor		20

Figure 5 – One typical reclosing sequence of high speed earthing switches (HSESs)	21
Figure 6 – Procedure for insulation design	23
Figure B.1 – Demand situation in Italy	26
Figure B.2 – UHV transmission lines in Italy as originally planned in '70	27
Figure B.3 – SPIRA system and SICRE system	28
Figure B.4 – Preliminary system design	29
Figure B.5 – Field testing of UHV equipment.....	30
Figure B.6 – UHV AC transmission projects implemented in China.....	32
Figure B.7 – Single-line diagram of Changzhi-Nanyang-Jingmen UHV AC pilot project	33
Figure B.8 – Artificial grounding test of UHV series capacitors in China	34
Figure B.9 – Single-line diagram of Huainan-Zhebei-Shanghai double-circuit UHV AC project	34
Figure B.10 – Generator integrated into a UHV system through a UHV step-up transformer	35
Figure B.11 –Hubei Wuhan UHV AC test base	38
Figure B.12 –Hebei Bazhou UHV tower test base	38
Figure B.13 – 1 200 kV national test station (India).....	41
Figure B.14 – Power flow from Satna to Bina diverted via a 1 200 kV test station (India)	42
Figure B.15 – Schematic of 1 200 kV UHV AC line.....	43
Figure B.16 – Typical V-I characteristic of 1 200 kV MOSA	44
Figure B.17 – Sequence of events for calculation of surge arrester energy accumulation	45
Figure B.18 – Trend of peak demand in Japan	46
Figure B.19 – UHV transmission line for each construction year in Japan	47
Figure B.20 – Concept for transmission capacity enhancement with short-circuit current restriction.....	47
Figure B.21 – Insulation design sequence of 1 100 kV transmission lines' air gap clearances	48
Figure B.22 – UHV designed transmission line in TEPCO	49
Figure B.23 – Field testing of UHV substation equipment since 1996	50
Figure C.1 – UHV AC transformer	53
Figure C.2 – UHV AC shunt reactor	54
Figure C.3 – Reactor and capacitor at tertiary side of UHV transformer	55
Figure C.4 – UHV GIS.....	56
Figure C.5 – UHV MTS	56
Figure C.6 – UHV air insulated disconnectors	57
Figure C.7 – Single-line diagram of UHV series capacitor	58
Figure C.8 – UHV series capacitor	58
Figure C.9 – UHV GIL tunnel below Yangtze River.....	59
Figure C.10 – Inside a UHV GIL tunnel during assembly	59
Figure C.11 – 333 MVA transformer for the 1 200 kV test station	61
Figure C.12 – First prototype of 850 kV surge arrester for 1 200 kV system	62
Figure C.13 – UHV circuit-breaker in India	63
Figure C.14 – Instrument transformer	64
Figure C.15 – 1 100 kV gas circuit-breaker	65

Figure C.16 – Resistor-assisted disconnecting operation	65
Figure C.17 – Surge arrester with low protection level	66
Table 1 – Specification of reclosing scheme.....	21
Table B.1 – Specifications of 1 100 kV transformer	30
Table B.2 – Specifications of pilot plant (substation).....	31
Table B.3 – Specifications of pilot plant (cable).....	31
Table B.4 – Parameters of substation and switching station of Changzhi-Nanyang-Jingmen UHV AC pilot project.....	33
Table B.5 – Parameters of transmission lines of Changzhi-Nanyang-Jingmen UHV AC pilot project.....	33
Table B.6 – Main system parameters of UHV AC projects in China	35
Table B.7 – Main system parameters of UHV arrester	36
Table B.8 – Required minimum value of clearance of the 1 100 kV transmission line	37
Table B.9 – Minimum clearance of UHV substation (metres).....	37
Table B.10 – Overvoltage withstand level of UHV AC projects in China.....	38
Table B.11 – Basic technical parameters for 1 200 kV UHV AC system selected in India	43
Table B.12 – TOV and energy absorption by surge arrester	45
Table B.13 – Requirement against large charging MVA.....	49
Table B.14 – Specifications of substation insulation design.....	49
Table B.15 – Specifications of 1 100 kV transformer	50
Table B.16 – Specifications of 1 100 kV GIS	51
Table B.17 – Example of field test – Measurement items of transformer	51
Table B.18 – Example of field test – Measurement items of GIS	52
Table C.1 – Main parameters of UHV AC typical transformer	53
Table C.2 – Main parameters of UHV AC reactive power compensation equipment.....	54
Table C.3 – Main parameters of UHV AC circuit-breaker.....	55
Table C.4 – Rated values of UHV SCs in Changzhi-Nanyang-Jingmen UHV extension project	58
Table C.5 – Specifications of 333 MVA transformer for the 1 200 kV test station.....	60
Table C.6 – Technical specifications of surge arrester	61
Table C.7 – Technical parameters of UHV circuit-breaker	62
Table C.8 – Parameters of instrument transformer	63
Table C.9 – Specifications of gas circuit-breaker	65
Table C.10 – Specifications of surge arrester.....	66

INTERNATIONAL ELECTROTECHNICAL COMMISSION

UHV AC TRANSMISSION SYSTEMS –

Part 102: General system design

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INTRODUCTION

Large capacity power sources including large-scale renewable energy have recently been developed, but they are generally located far away from load centres. To meet the requirements for large capacity power transmission, some countries have introduced, or are considering introducing, ultra high voltage (UHV) transmission systems, overlaying these on the existing extra high voltage (EHV) systems.

The objective of UHV AC power system planning and design is to achieve both economic efficiency and high reliability, considering its impact on EHV systems.

Moreover, UHV AC transmission systems require comparatively large spaces, and the method of minimizing and optimizing the size and structure of UHV AC transmission lines and substation apparatus is another important issue.

UHV AC TRANSMISSION SYSTEMS –

Part 102: General system design

1 Scope

This part of IEC 63042 specifies the procedure to plan and design UHV transmission projects and the items to be considered.

2 Normative references

There are no normative references in this document.