

Implementation of the Complex (Consolidated) Safety Upgrade Program of Power Units of Ukrainian Nuclear Power Plants during the 1st Quarter, 2019

The Complex (Consolidated) Safety Upgrade Program of Power Units of Ukrainian Nuclear Power Plants (CCSUP) was approved by the Decree of the Cabinet of Ministers of Ukraine No1270 of 07.12.2011. In 2012 the CCSUP was supplemented with additional measures according to conclusions of the National Report of Ukraine on results of specific reevaluation of nuclear facilities situated on NPP sites ("stress-tests"), taking into account the lessons from Japanese NPP "Fukushima-Daichi" accident of March, 2011.

The CCSUP document package (consolidated measures, their lists per power unit type, as well as each CCSUP action card) was published in the source language at the official web-site of SE NNEGC «Energoatom»:

http://www.energoatom.com.ua/ua/actvts-16/integrated_security_program-161/p/komplekt_dokumentiv_z_kzppb-4913

The implementation status of CCSUP initially planned and additional measures as of 31.03.2019 is provided in Tables 1, 2 and Tables 3, 4 accordingly.

Totally, as of 31.03.2019, 860 measures out of 1295 ones were completed and 435 ones are to be implemented, including about 90 measures planned to be completed to the end 2019.

Table 1 - Implementation of CCSUP initially planned measures (as of 31.03.2019)

NPP	Unit	Total Number of Measures	Completed	To Implement
SS ZNPP	ZNPP-1	77	67	10
	ZNPP-2	77	65	12
	ZNPP-3	76	50	26
	ZNPP-4	76	57	19
	ZNPP-5	76	35	41
	ZNPP-6	77	36	41
	Common	3	1	2
	Totally	462	311	151
SS RNPP	RNPP-1	54	41	13
	RNPP-2	53	41	12
	RNPP-3	79	67	12
	RNPP-4	79	63	16
	Common	5	3	2
	Totally	270	215	55
SS KhNPP	KhNPP-1	79	48	31
	KhNPP-2	79	56	23
	Common	4	3	1
	Totally	162	107	55
SS SUNPP	SUNPP-1	53	49	4
	SUNPP-2	53	43	10
	SUNPP-3	77	42	35
	Common	5	1	4
	Totally	188	135	53
TOTAL		1082	768	314

Table 2 - List of completed CCSUP initially planned measures as of 31.03.2019

NPP	Unit	Completed before reporting Quarter	Completed during reporting Quarter
ZNPP	Unit 1	10101, 11302, 11303, 11304, 12101, 12102, 12201, 12202, 12203, 12301, 13101, 13102, 13103, 13202, 13301, 13302, 13303, 13305, 13401, 13403, 13501,	

NPP	Unit	Completed before reporting Quarter	Completed during reporting Quarter
		13503, 13504, 13505, 13508, 13509, 14101, 14102, 14103, 14104, 14105, 14106, 14201, 14202, 14203, 14204, 14205, 14206, 14301, 14402, 14403, 14405, 14406, 15201, 15202, 15203, 15204, 15205, 15207, 15208, 15211, 15212, 16101, 16201, 16202, 16203, 17101, 17103, 17104, 17201, 19101, 19102, 19103, 19201, 19202, 19203, 19204	
	Unit 2	10101, 11302, 11303, 11304, 12101, 12102, 12201, 12202, 12203, 12301, 13101, 13102, 13103, 13202, 13301, 13302, 13303, 13305, 13401, 13403, 13503, 13504, 13505, 13508, 13509, 14101, 14102, 14103, 14104, 14105, 14106, 14201, 14202, 14203, 14204, 14205, 14206, 14301, 14402, 14403, 14405, 14406, 15201, 15203, 15204, 15205, 15207, 15208, 15211, 15212, 16101, 16201, 16202, 16203, 17101, 17103, 17104, 17201, 19101, 19102, 19103, 19201, 19202, 19203, 19204	
	Unit 3	10101, 11303, 11304, 12101, 12102, 12201, 12202, 12203, 13101, 13102, 13103, 13202, 13301, 13302, 13303, 13305, 13401, 13403, 13501, 13504, 13505, 13508, 14102, 14104, 14201, 14202, 14203, 14204, 14206, 14402, 15201, 15202, 15203, 15205, 15207, 15211, 16101, 16203, 17201, 19101, 19102, 19103, 19201, 19202, 19203, 19204	13503, 14403, 15212, 16201,
	Unit 4	10101, 11303, 11304, 12101, 12102, 12201, 12202, 12203, 13101, 13102, 13103, 13202, 13301, 13302, 13303, 13305, 13401, 13403, 13501, 13502, 13503, 13504, 13505, 13508, 13509, 14102, 14104, 14201, 14202, 14203, 14204, 14206, 14402, 14406, 15201, 15202, 15203, 15205, 15211, 15212, 16101, 16201, 16203, 17201, 19101, 19102, 19103, 19201, 19202, 19203, 19204	14103, 14105, 14106, 14301, 14403, 16202,
	Unit 5	11303, 11304, 12101, 12201, 12202, 12203, 13101, 13102, 13103, 13202, 13301, 13303, 13305, 13401, 13403, 13505, 13508, 14104, 14105, 14201, 14202, 14203, 14206, 14402, 15203, 15205, 15211, 16203, 17102, 19101, 19201, 19202, 19203, 19204	19102,
	Unit 6	11303, 11304, 12101, 12201, 12202, 12203, 13101, 13102, 13103, 13202, 13301, 13303, 13305, 13401, 13403, 13504, 13505, 13506, 13508, 14104, 14201, 14203, 14205, 14206, 14402, 15203, 15205, 15211, 17103, 19101, 19201, 19202, 19203, 19204	16203, 19102,
	Common	13507	
	Totally	298	13
	RNPP	Unit 1	30101, 31101, 31102, 32101, 32302, 32401, 33302, 33303, 33501, 33502, 33503, 34103, 34106, 34107, 34201, 34301, 34401, 34402, 34403, 34404, 34406, 34407, 34408, 34409, 35201, 35202, 35203, 35204, 35205, 35206, 37102, 37103, 37105, 39101, 39102, 39103, 39104, 39201, 39202, 39203, 39204
Unit 2		30101, 31101, 31102, 32101, 32401, 33302, 33303, 33501, 33502, 33503, 34103, 34104, 34106, 34107, 34201, 34301, 34401, 34402, 34403, 34404, 34406, 34407, 34408, 34409, 35201, 35202, 35203, 35204, 35205, 35206, 37102, 37103, 37105, 39101, 39102, 39103, 39104, 39201, 39202, 39203, 39204	
Unit 3		10101, 11302, 11303, 11304, 12101, 12102, 12201, 12202, 12301, 13101, 13102, 13103, 13202, 13301,	14101, 16201,

NPP	Unit	Completed before reporting Quarter	Completed during reporting Quarter
		13302, 13303, 13304, 13305, 13401, 13403, 13501, 13502, 13503, 13504, 13505, 13506, 13508, 13509, 14102, 14103, 14104, 14106, 14201, 14202, 14203, 14204, 14205, 14206, 14401, 14402, 14403, 14404, 14405, 14406, 14407, 15201, 15202, 15203, 15204, 15211, 15212, 16101, 16202, 16203, 17101, 17102, 17103, 17201, 19101, 19102, 19103, 19201, 19202, 19203, 19204	
	Unit 4	11302, 11303, 11304, 12101, 12102, 12201, 12202, 12203, 12301, 12401, 13101, 13102, 13103, 13202, 13301, 13303, 13304, 13305, 13401, 13402, 13403, 13501, 13502, 13503, 13504, 13505, 13506, 13508, 13509, 14102, 14103, 14104, 14105, 14106, 14201, 14202, 14203, 14204, 14206, 14301, 14402, 14403, 14405, 14406, 14407, 15201, 15203, 15204, 15212, 16203, 17101, 17102, 17103, 17201, 19101, 19102, 19103, 19201, 19202, 19203, 19204	14101,
	Common	12302, 15101, 33201	
	Totally	212	3
KhNPP	Unit 1	10101, 11302, 11303, 11304, 12101, 12102, 12201, 12202, 12301, 13101, 13102, 13103, 13202, 13301, 13303, 13304, 13305, 13401, 13403, 13501, 13502, 13504, 13505, 13506, 13508, 14102, 14103, 14201, 14202, 14203, 14204, 14206, 14402, 14403, 15203, 15211, 16203, 17101, 17103, 19101, 19102, 19201, 19202, 19203, 19204	14104, 15202,
	Unit 2	11302, 11303, 11304, 12101, 12102, 12201, 12202, 12301, 13101, 13102, 13103, 13202, 13301, 13302, 13303, 13304, 13305, 13401, 13403, 13501, 13502, 13503, 13504, 13505, 13506, 13508, 13509, 14102, 14103, 14104, 14201, 14202, 14203, 14204, 14206, 14402, 14403, 14405, 15201, 15202, 15203, 15205, 15211, 16203, 17101, 17102, 17103, 17201, 19101, 19102, 19103, 19201, 19202, 19203, 19204	10101,
	Common	12302, 13507, 15101	
	Totally	104	3
SUNPP	Unit 1	20101, 21302, 22101, 22102, 22201, 22202, 22203, 22301, 23103, 23301, 23302, 23401, 23402, 23403, 23501, 23502, 23503, 23504, 23509, 24102, 24103, 24104, 24202, 24205, 24401, 24403, 24404, 25101, 25201, 25202, 25203, 25204, 25205, 25207, 25208, 26101, 26201, 26202, 26203, 27101, 27201, 27203, 28101, 29101, 29102, 29103, 29203, 29204	26205,
	Unit 2	20101, 21302, 22101, 22102, 22201, 22202, 22203, 22301, 23103, 23301, 23302, 23401, 23402, 23403, 23501, 23502, 23503, 23504, 24102, 24103, 24104, 24202, 24205, 24403, 25101, 25201, 25202, 25204, 25207, 25208, 26101, 26202, 26203, 26205, 27101, 27201, 27203, 28101, 29101, 29102, 29103, 29203, 29204,	
	Unit 3	10101, 11302, 11303, 11304, 12101, 12201, 12202, 12203, 13101, 13103, 13202, 13301, 13303, 13305, 13401, 13501, 13502, 13503, 13504, 13508, 14201, 14202, 14203, 14206, 14405, 16202, 17103, 18101, 19101, 19102, 19103, 19201, 19202, 19203, 19204	13102, 13403, 14102, 14104, 15211, 16203,
	Common	15101,	
	Totally	128	7

Table 3 - Implementation of CCSUP additional measures (as of 31.03.2019)

NPP	Unit	Total Number of Measures	Completed	To Implement
SS ZNPP	ZNPP-1	12	7	5
	ZNPP-2	12	7	5
	ZNPP-3	12	7	5
	ZNPP-4	12	4	8
	ZNPP-5	12	2	10
	ZNPP-6	12	2	10
	Common	3	0	3
	Totally	75	29	46
SS RNPP	RNPP-1	15	7	8
	RNPP-2	15	8	7
	RNPP-3	12	8	4
	RNPP-4	12	8	4
	Common	3	2	1
	Totally	57	33	24
SS KhNPP	KhNPP-1	12	3	9
	KhNPP-2	12	6	6
	Common	2	0	2
	Totally	26	9	17
SS SUNPP	SUNPP-1	16	9	7
	SUNPP-2	17	8	9
	SUNPP-3	12	2	10
	Common	2	1	1
	Totally	47	20	27
SE NNEGC «Energoatom»	Totally	8	1	7
TOTAL		213	92	121

Table 4 - List of completed CCSUP additional measures as of 31.03.2019

NPP	Unit	Completed before reporting Quarter	Completed during reporting Quarter
ZNPP	Unit 1	11305, 13307, 13511, 15103, 17108, 17109, 17110	
	Unit 2	11305, 13307, 13511, 15103, 17108, 17109, 17110	
	Unit 3	11305, 13307, 13511, 15103, 17108, 17109, 17110	
	Unit 4	11305, 13511, 17108, 17110	
	Unit 5	17108, 17110	
	Unit 6	17108, 17110	
	Common		
	Totally	29	0
RNPP	Unit 1	31305, 33307, 33511, 34101, 37107, 37112, 37113	
	Unit 2	31305, 33307, 33511, 34101, 35103, 37107, 37112, 37113	
	Unit 3	11305, 13307, 13511, 15103, 17105, 17107, 17109, 17110,	
	Unit 4	11305, 13307, 13511, 15103, 17107, 17108, 17109, 17110	
	Common	18102, 39105	
	Totally	33	0
KhNPP	Unit 1	17108, 17109	13307,
	Unit 2	11305, 13511, 17108, 17109, 17110	13307,
	Common		
	Totally	7	2

NPP	Unit	Completed before reporting Quarter	Completed during reporting Quarter
SUNPP	Unit 1	21305, 23307, 23511, 27102, 27106, 27108, 27109, 27110, 27111	
	Unit 2	21305, 23307, 23511, 27102, 27108, 27109, 27110, 27111	
	Unit 3	13307, 13511,	
	Common	18102	
	Totally	20	0
SE NNEGC		33308	
“Energoatom”	Totally	1	0