

LTR-1000-205822

2018/08/09

Yes



To: Mr.A.V.Vostrikov

**Deputy General Director of Rusatom Service JSC for Operation Support –
ATEX JSC Managing Director**

Sub: Submission of Design-basis Codes and Software Tools List for BNPP-1

Dear Sir,

With reference to letter No. 340-01-19/898 dated 28.06.2018, please find enclosed the list of selected design-basis codes and software tools. Please be informed that since the submitted list of DBC and SWTs by ATEX does not cover the whole area of technical support needs, the a.m. list have been modified to include some other codes.

In addition, it is highly recommended that JSC ATEX would submit a comprehensive and detailed technical/commercial description of the codes/SWTs in order to facilitate TAVANA with finalization of the a.m. list.

Sincerely yours

H.Ghaffari

Bushehr NPP Manager and Managing Director



List of selected Design basis codes and Software tools needed by TAVANA Co

Sl. NO	Software Name	Field of Application	SWT Developer
1	SFUEL	Nuclear fuel management	REA concern
2	NOSTRA	Nuclear fuel management	RCC KI
3	RELVVER	-	RCC KI
4	RTOP	Radiation protection	RF ssc TRINITI
5	ANGAR	Thermal hydraulic and Accident Analysis	AEP
6	SOCRAT/BI *	Thermal hydraulics and Accident Analysis	IBREA St-Petersburg AEP
7	KORSARIGP	Thermal hydraulics and Accident Analysis	Gidropress
8	BETTA-GAMMA PROEKT	Calculation of accumulated activity of radionuclides in the components of the plant process systems	Atomenergoproekt
9	COTRAN-M	Radiation protection	RCCKI
10	DOZA	Calculations of individual effective exposure doses to the population living in the region around the NPP .	-
11	RAMEK 1	Flow Accelerated Corrosion	JSC Geoterm-EM
12	ASTRA-AES	Pipelines System Automated Analysis For Strength Vibration	SRC STADIO
13	ЗКИ-02.1	Calculation Of Flow Accelerated Corrosion (Single Phase Medium)	VNIIAES
14	ЗКИ-03.1	Calculation Of Flow Accelerated Corrosion (Single Phase Medium)	VNIIAES
15	ИАС ЭНК МОиТ	NPP components aging management (Nondestructive inspectin)	VNIIAES
16	ПН-2.0	Strength reliability	VNHA ES
17	MFDO	NPP life cycle management	VNHAES

*It is recommended that any relevant code with the capability to simulate the ex-vessel (or both in-vessel and ex-vessel) phase of severe accident be introduced by ATEX.