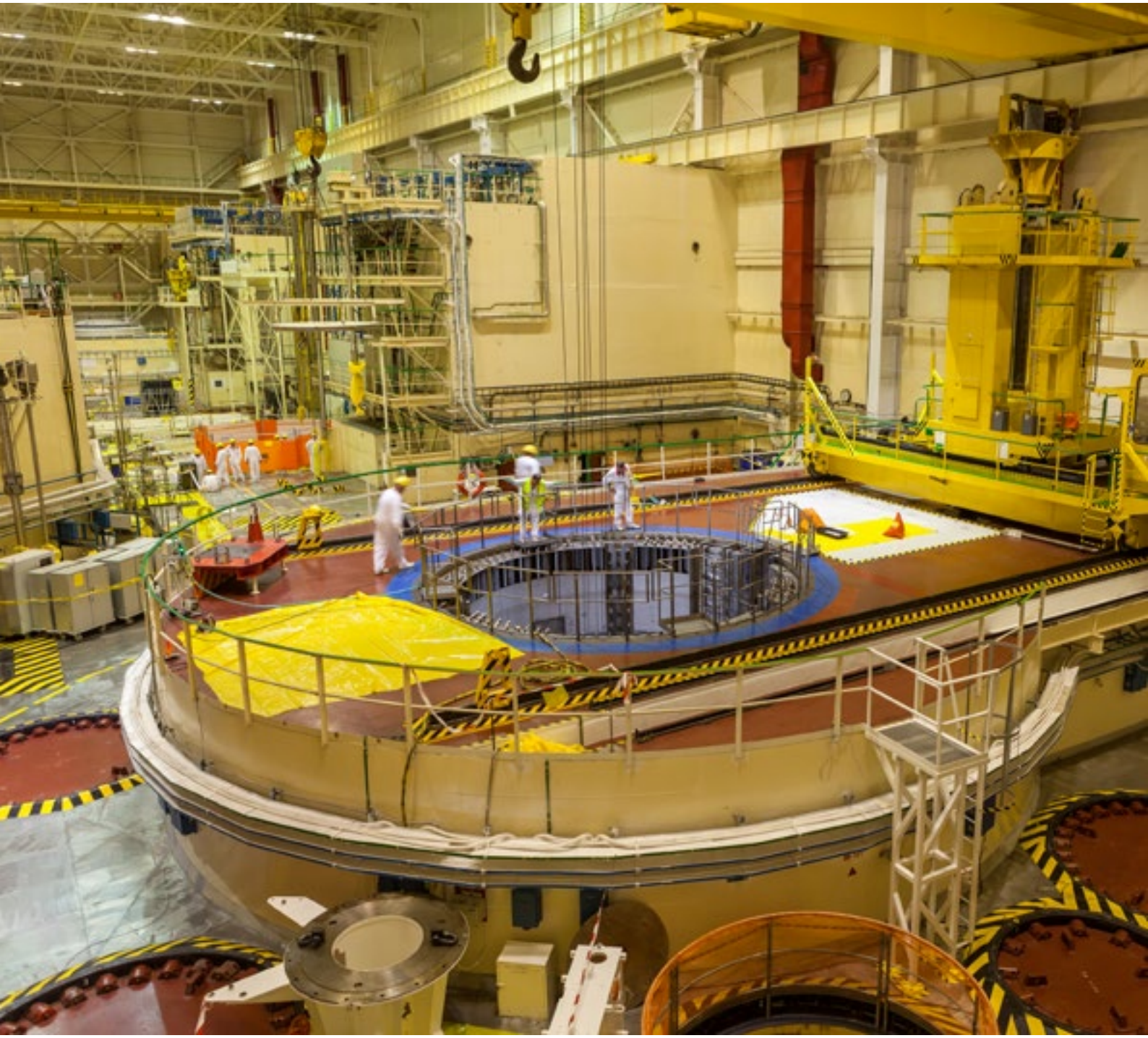
2015
OPERATION AND SAFETY REPORT OF MOCHOVCE AND BOHUNICE V2 NUCLEAR POWER PLANTS



SLOVENSKÉ ELEKTRÁRNE

The Company is certified according to three management systems:

Certificate STN EN ISO 9001:2008 – Quality management system

Certificate STN OHSAS 18001:2009 – Occupational health and safety management certificate

Certificate STN EN ISO 14001:2005 – Environmental management system

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BUREAU VERITAS

2015 – Highlights

NPP Bohunice V2 (EBO)

February
Visit of mayors of towns of Piešťany, Hlohovec and Leopoldov

March
WANO Technical Support Mission - Corrective Actions Programme

July
WANO Follow up Peer Review

September
WANO Corporate Peer Review

September
Visit of the mayor of the town of Trnava

October
Visit of the Japanese Ambassador, Akio Egawa, accompanied by the first secretary of the embassy, Shinji Soyamu

November
WANO Technical Support Mission - Effective Maintenance Procedures

November
Benchmarking with the NPP Olkiluoto (Finland) in - Emergency Preparedness

NPP Mochovce (EMO)

May
visit of the Legislative Council of the Government of the Slovak Republic

May
WANO Peer Review Follow-up

May
visit of the Japanese Ambassador, Mr Akio Egawa

June
visit of the business advisor of the Embassy of the Republic of Belarus and representatives of Belenergo

June
WANO Technical Support Mission – control of SOER recommendations

September
WANO Corporate Peer Review

October
WANO Technical Support Mission – differences in the process of Emergency Preparedness connected with MO34 start-up

November
WANO Technical Support Mission – operation and maintenance of main shut-off valves

General data

	1st criticality *	Start of permanent operation
EBO 3	07.08.1984	14.02.1985
EBO 4	02.08.1985	18.12.1985
EMO 1	09.06.1998	29.01.1999
EMO 2	01.12.1999	11.07.2000

EMO – Mochovce Nuclear Power Plant (units 1&2)
EBO – Bohunice Nuclear Power Plant V2 (units 3&4)

* 1st criticality – first reach of minimal controlled power

EBO	Unit 3	Unit 4
Probability of the reactor core damage at full power (according to PSAL 1 – probabilistic safety assessment level 1)	3.688E-06	3.706E-06
Probability of the reactor core damage at shutdown reactor (according to PSA)	6.15E-06	6.15E-06

EMO	Units 1&2
Probability of the reactor core damage at full power (according to PSAL 1 – probabilistic safety assessment level 1)	7.39E-6
Probability of the reactor core damage at shutdown reactor (SD PSAL 1)	7.92E-6

Basic technical data

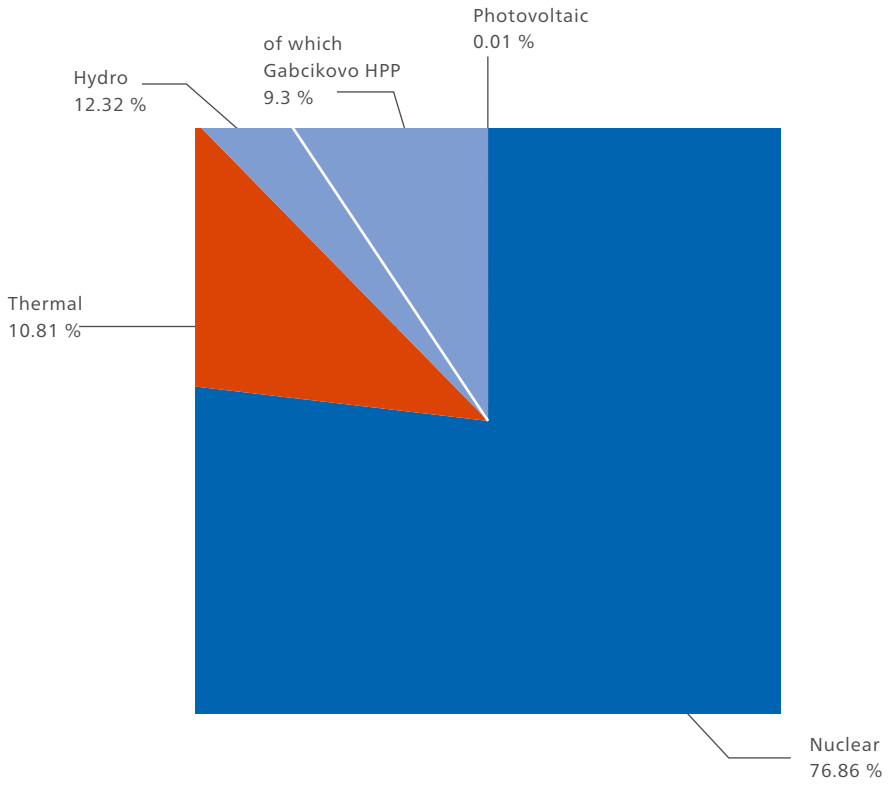
Reactor type	VVER 440/V-213 – Pressurized water reactor / PWR
Reactor thermal power	1.471MWt
Reactor rated power	470MWe (EMO) / 505MWe (EBO)
Home consumption	~7.2 % (EMO) / ~6.8 % (EBO)
Fuel	UO_2 (42 t)
Fuel enrichment	4.87 % U-235
Primary circuit	
Number of cooling loops	6
Coolant flow rate	42.600m^3/h
Total volume	242m^3
Working pressure and temperature	12.26MPa / 267.9°C – 297.3°C
Reactor pressure vessel	
Internal diameter	3.542mm
Wall thickness	140 + 9mm
Height	11.805mm
Steam generator	6 per unit
Type	PGV - 213
Volume of steam generated	450 t/h
Outlet steam pressure and temperature	4.61MPa / 255°C
Turbo generator	2 per unit
Type	ŠKODA 220MWe (EMO)/ ŠKODA 250MWe (EBO)
Number of stages	1 HP, 2 LP
Rated speed	3.000 rpm
Generator rated apparent power	259MVA (EMO) / 273MVA (EBO)
Terminal voltage	15.75 kV
Rated current	3 x 9.500A (EMO) / 3 x 10.007A (EBO)
Condenser	
Cooling water volume	35.000m^3/h
Maximal cooling water temperature	33°C
Cooling towers	
Number	4 (per 2 units)
Height	125m (EMO) / 120m (EBO)

Share in electricity generation

Share in total SE generation (2015)

	GWh	%
EBO	7 622,544	
EMO	7 523,130	
SE – nuclear power plants	15 146	76,86
SE – thermal power plants	2 130	10,81
SE – hydro power plants	2 429*	12,32
SE – photovoltaic plants	2	0,01
SE total	**19 707**	**100**

90% of electricity produced without CO_2 emissions
*Including Gabčíkovo by 10.3.2015



Electricity & heat generation

Basic operation indicators

Indicator	Unit		2011	2012	2013	2014	2015	Since start of operation
Electricity generation	MWh	3	3,851,256	4,045,086	4,008,543	4,010,463	3,649,596	97,326,779
		4	4,005,414	3,910,497	4,070,951	4,045,787	3,972,948	96,318,655
		EBO	7,856,670	7,955,583	8,079,494	8,056,250	7,622,544	193,645,434
		1	3,820,511	3,807,209	3,801,879	3,803,613	3,703,388	58,023,612
		2	3,733,587	3,731,814	3,838,205	3,639,452	3,819,742	52,689,650
		EMO	7,554,098	7,539,023	7,640,084	7,443,065	7,523,130	110,713,262
Electricity supply	MWh	3	3,595,925	3,773,707	3,726,975	3,740,880	3,400,201	90,304,257
		4	3,745,795	3,651,241	3,788,681	3,778,751	3,707,017	89,510,308
		EBO	7,341,720	7,424,948	7,515,656	7,519,631	7,107,218	179,814,565
		1	3,542,880	3,543,121	3,537,615	3,542,009	3,447,569	53,712,903
		2	3,480,325	3,481,044	3,563,930	3,395,671	3,565,101	48,909,372
		EMO	7,023,205	7,024,165	7,101,545	6,937,680	7,012,670	102,622,275
Heat supply	GJ	3	992,108	976,617	925,073	744,462	975,303	21,579,897
		4	977,344	945,533	930,598	819,031	753,254	21,035,320
		EBO	1,969,452	1,922,150	1,855,671	1,563,493	1,728,557	42,615,217
		1	259,680	206,105	204,771	212,205	195,961	2,702,921
		2	24,404	57,594	86,332	18,997	43,054	1,681,775
		EMO	284,084	263,699	291,103	231,202	239,015	4,384,696
Operation period	h	3	7,901	8,295	8246	8254	7635	232,140
		4	8,225	7,953	8313	8314	8285	229,665
		1	8308	8,191	8,197	8,262	8,071	135,657
		2	8254	7,940	8,277	7,844	8,299	124,029
General overhaul period	Dni	3	35.79	20.36	1,405.76	21.1	46.36	1,525.73
		4	22.31	33.98	1,352.68	18.6	19.8	1,431.97
		1	21.6	23.2	23.55	20.6	27.2	649.1
		2	22.1	24.9	20.00	38.3	19.3	570.1
Gross efficiency	%	3	34.31	34.17	31.71	33.73	33.94	31.96
		4	34.48	34.56	31.72	34.0	33.96	32.0
		EBO	34.4	34.36	31.71	33.87	33.95	31.98
		1	32.64	32.51	32.64	32.71	32.31	32.29
		2	32.06	32.12	32.24	32.48	32.47	31.91
		EMO	32.35	32.32	32.43	32.60	32.39	32.11

General overhauls (refuelling outages) in 2015

Unit	from	to	Days
EBO 3	30.05.2015, 02:53	15.07.2015, 11:37	46.36
EBO 4	25.04.2015, 02:57	14.05.2015, 21:47	19.8
EMO 1	21.03.2015, 03:00	17.04.2015, 09:28	27.2
EMO 2	26.09.2015, 03:00	15.10.2015, 10:50	19.3

Human resources

Headcount

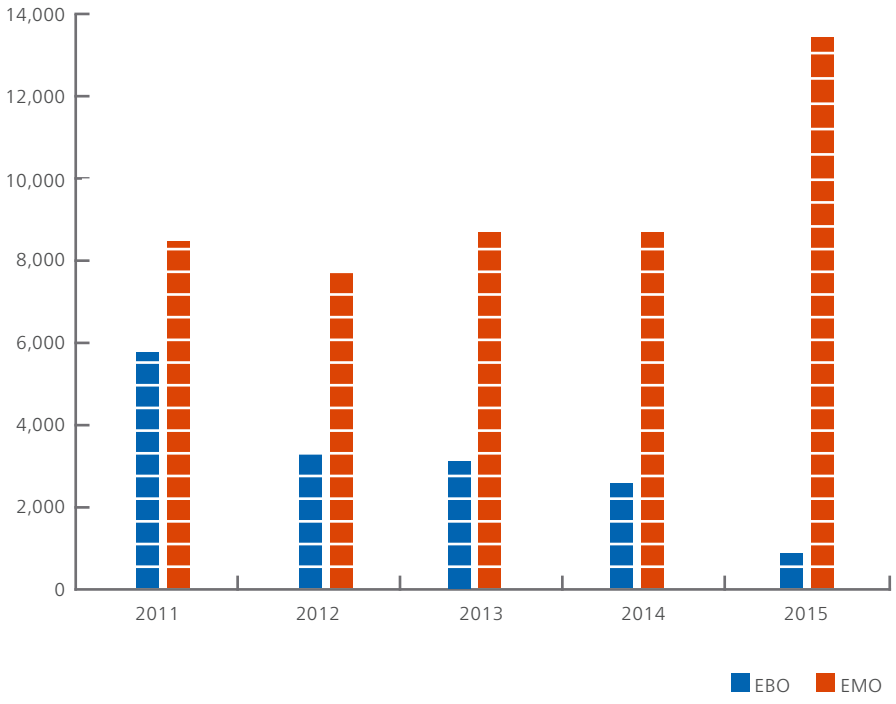
	2011	2012	2013	2014	2015
EBO	1335	1318	1 265	1083	1041
EMO	1519	1489	1429	1343	1333*

*including staff training for MO34 operation

Education level of staff

	EBO	EMO
Secondary school	621	743
University	420	590

Public relations



Number of Information centre visitors

	2011	2012	2013	2014	2015
EBO	5,647	3,489	3,284	2,477	758
EMO	8,339	7,872	10,359	10,363	15,606

Assessment of operational safety of SE nuclear installations

Foreword

This chapter fulfils requirements defined in the Atomic Act No. 541/2004, Section 10 /1) (l).

Pursuant to the Act, nuclear safety shall mean technical conditions and capability of the nuclear installation of transport equipment, as well as capability of their operating staff to prevent uncontrolled release of radioactive substances or ionizing radiation to the working or natural environment and the ability to prevent events and to mitigate consequences of events in nuclear installations or during transport of radioactive materials.

Slovenské elektrárne and holder of the operation license for nuclear installations issued by the Nuclear Regulatory Authority of the Slovak Republic pursuant to the Act No. 541/2004 define safety and namely nuclear safety and radiation protection as the top priority in their strategic vision permanently superior to production requirements and commercial profit.

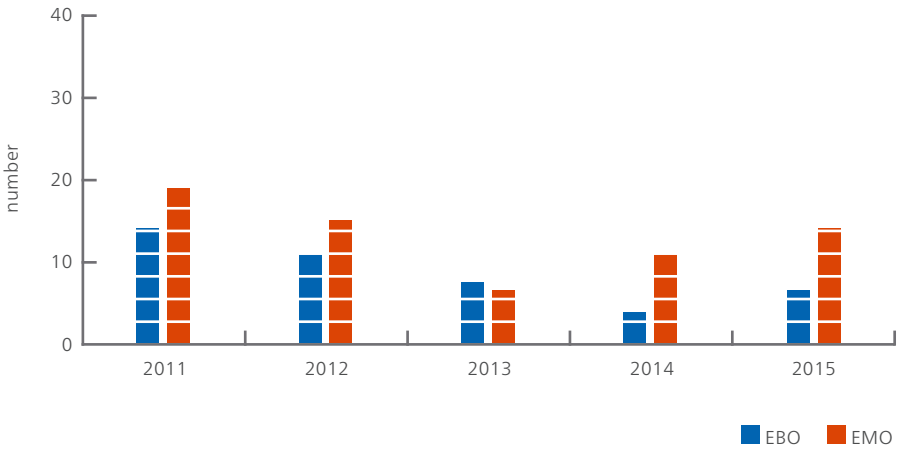
Based on legislative requirements and international recommendations, Slovenské elektrárne established a uniform safety assessment system used as safety management tool. The complete safety management process is divided to several areas evaluated by the operational safety indicators (OSI).

Significant operational indicators and areas

1. Operational events

Nuclear installation failures described in the above mentioned Act generally include any unplanned deviations from standard conditions. Thus, they are the power plant safety and reliability indicators. Various types of events have different causes and different levels of impact on safety.

Operating events reported by SE to the NRA SR:



	2011	2012	2013	2014	2015
EBO	14	11	8	4	7
EMO	19	15	7	11	14

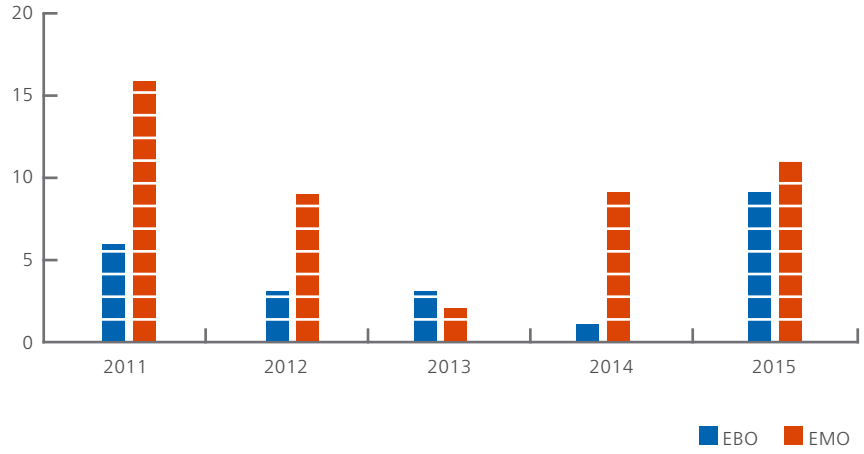
In EBO a total of 7 and in EMO 14 lowest-category events (fault) were recorded, reportable to the NRA SR. For EBO it is its second lowest number of reportable events in its history. There were no incident or accident events recorded.

2. Assessment of operational events using the INES scale

There are seven levels for assessment of operational events with impacts on nuclear safety and environment in the nuclear installation contained in the WANO guide.
Number of operational events of INES 0 (i.e., below the scale "deviation with safety importance")

Number of INES 0 events (below the scale)

INES 0	2011	2012	2013	2014	2015
EBO	6	3	3	1	9
EMO	16	9	2	9	11

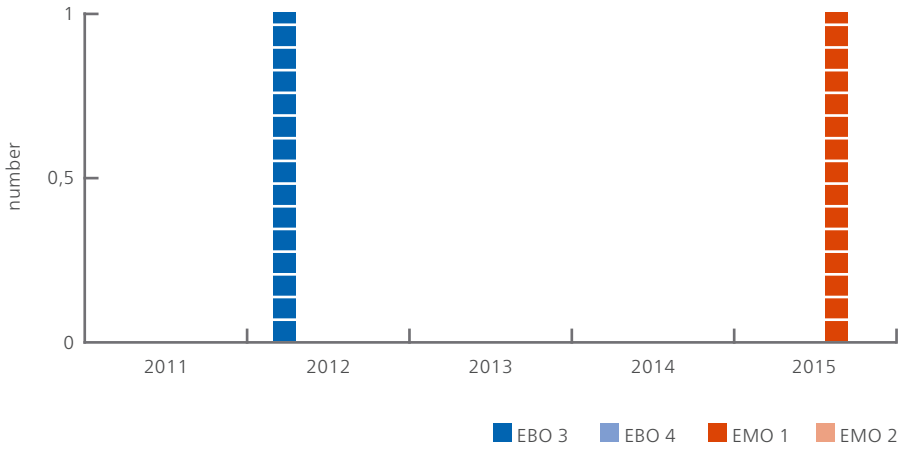


Number of INES 1 events (anomaly)

INES 1	2011	2012	2013	2014	2015
EBO	0	1	0	0	0
EMO	0	0	0	0	0

3. Breach of limits and conditions for operating a nuclear installation

"Limits and conditions of NPP operation" (L&C) document approved by the NRA SR is the fundamental document for operation of nuclear installations. The operator´s duty is to monitor and evaluate observance of conditions defined in this document. The indicator monitors the management level, organization of nuclear installation (nuclear power plant) operation, correctness and observance of operating instructions and regulations to meet the requirements stipulated in L&C.



	2011	2012	2013	2014	2015
EBO3	0	1	0	0	0
EBO4	0	0	0	0	0
EMO1	0	0	0	0	1
EMO2	0	0	0	0	0

2015 recorded a breach of the limit condition - limit level of group VI control rod assemblies. After a drop in the limit value of the group VI control rod assemblies below the limit value at the time of the unit's start-up that followed the general overhaul, due to an organisational error the period for performing the required activity was extended by about 20 minutes. There was no threat to the performance of the required safety function.

4. Operation of nuclear installations

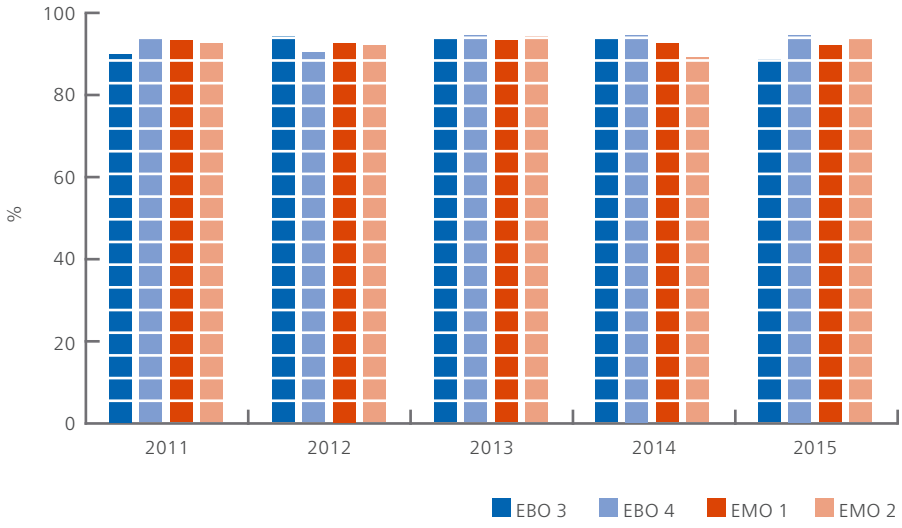
Slovenské elektrárne as operator of nuclear installation perform comprehensive assessment of NPP safety and reliability using specific indicators monitoring selected areas, including those defined by the World Association of Nuclear Operators (WANO), of which it is a member.

Results of individual WANO indicators:

4.1 Unit Capability Factor – UCF

The Unit capability factor is the ratio between the electricity the power plant is capable to generate over monitored period, and reference energy production expressed as percentage considering external limiting factors (e.g., dispatcher ordered power regulation, etc.).

2014 WANO PWR, 3-yr., median 86.07, best quartile 90.52, best decile 92.58.*



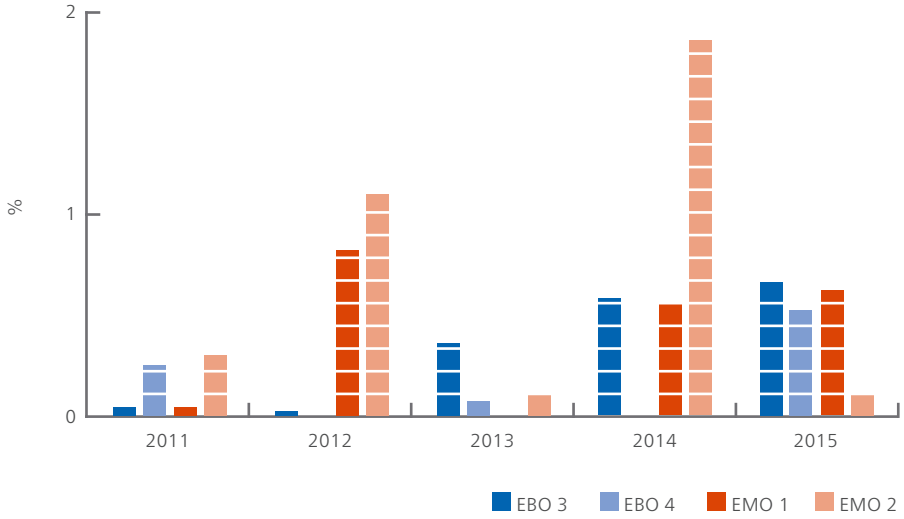
	2011	2012	2013	2014	2015
EBO3	89.94	94.17	93.71	93.9	86.81
EBO4	93.43	90.3	94.54	94.56	94.4
EMO1	93.27	92.63	93.33	92.55	91.59
EMO2	92.5	91.96	94.23	89.18	94.41

* Median – average 50% of all monitored cases
Quartile – 25% of the best in monitored group
Decile – 10% of the best in monitored group

4.2 Unplanned Capability Loss Factor – UCLF

This coefficient monitors progress in minimization of outages and unit power reductions resulting from equipment failures and other unplanned events. The indicator is defined as the ratio between the mean value of unplanned power reductions and reference production.

2014 WANO PWR, 3-yr., median 0.24, best quartile 0, best decile 0.

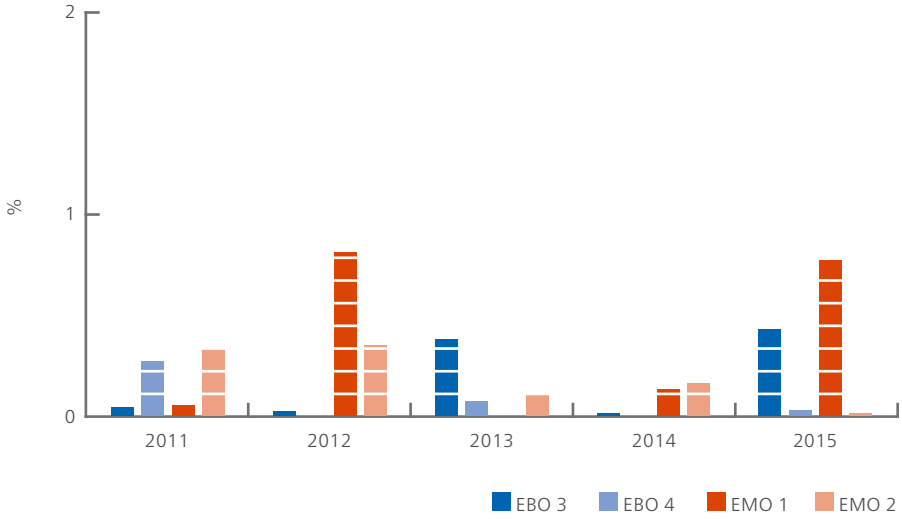


	2011	2012	R013	2014	2015
EBO3	0.04	0.02	0.36	0.58	0.73
EBO4	0.25	0	0.07	0	0.54
EMO1	0.04	0.82	0	0.55	0.71
EMO2	0.3	1.1	0.1	1.86	0.1

4.3 Forced Losses during Operation – FLR

This coefficient is defined as the ratio between unplanned power generation failures minus production losses caused by unplanned outage extensions, while considering only the operational period to reference production minus production losses corresponding with planned outages and their eventual unplanned extensions.

2014 WANO PWR, 3-yr., median 0.12, best quartile 0, best decile 0.

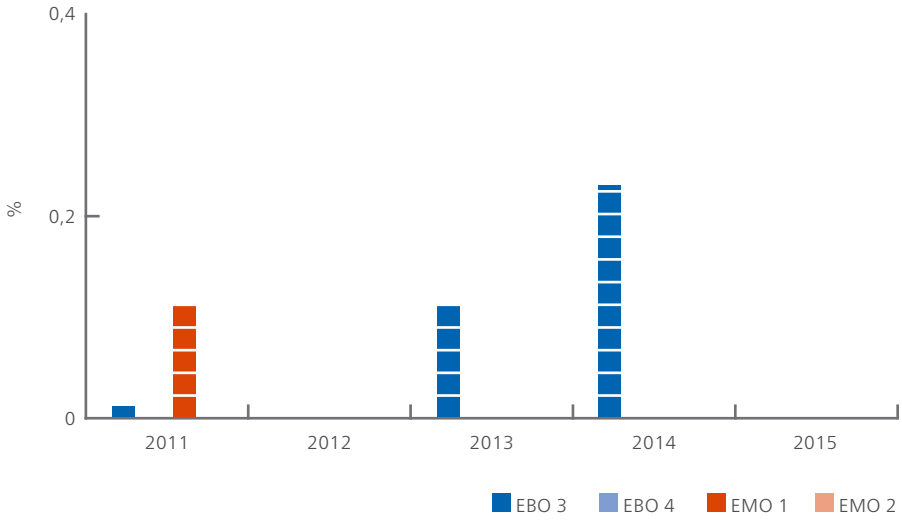


	2011	2012	2013	2014	2015
EBO3	0.04	0.02	0.38	0.01	0.4
EBO4	0.27	0	0.07	0	0.05
EMO1	0.05	0.81	0	0.13	0.77
EMO2	0.33	0.35	0.11	0.16	0.01

4.4 Grid Related Loss Factor – GRLF

This indicator is defined as the ratio between the production losses caused by grid instability or failure without the control possibility by the power plant during the monitored period, and reference production in given quarter expressed in percentage.

2014 WANO PWR, 3-yr., median 0.00, best quartile 0.00, best decile 0.00.

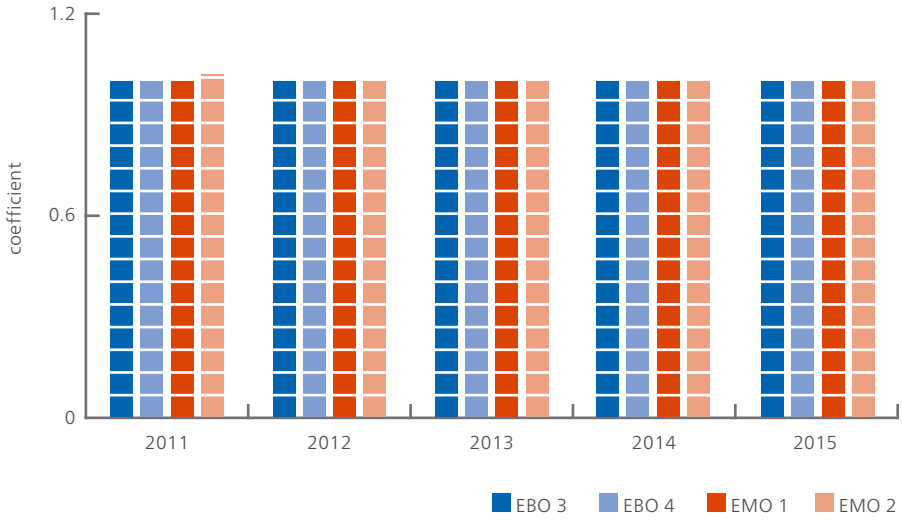


	2011	2012	2013	2014	2015
EBO3	0.1	0	0.11	0.23	0
EBO4	0	0	0	0	0
EMO1	0.11	0	0	0	0
EMO2	0	0	0	0	0

4.5 Chemical index

This indicator assess the efficiency of chemical mode management in the steam generators. The best reachable chemical index value is 1.0. The indicator compares the concentration of selected impurities with limit values. Each value is divided by the limit value and their sum is normalized to one.

2014 WANO, PWR, 3-yr., median 1.01, best quartile 1.00, best decile 1.00.

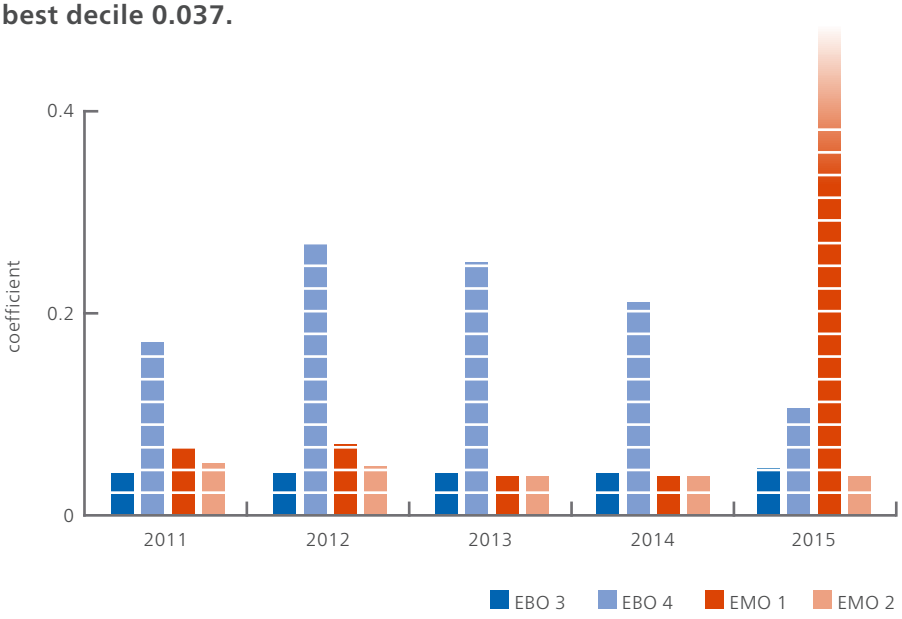


	2011	2012	2013	2014	2015
EBO3	1	1	1	1	1
EBO4	1	1	1	1	1
EMO1	1	1	1	1	1
EMO2	1.02	1	1	1	1

4.6 Fuel reliability

This indicator monitors increase and preservation of high fuel tightness. It is a general fuel leakage benchmark. The indicator is defined as balanced activity of the primary circuit given by Iodine 131 activity in kBq/l and corrected by the uranium contribution and normalized by the coolant purification rate.

2014 WANO PWR, 3-yr., median 0.04, best quartile 0.04, best decile 0.037.



	2011	2012	2013	2014	2015
EBO3	0.04	0.04	0.04	0.04	0.043
EBO4	0.17	0.27	0.25	0.21	0.134
EMO1	0.067	0.069	0.037	0.037	5.801
EMO2	0.05	0.047	0.037	0.037	0.037

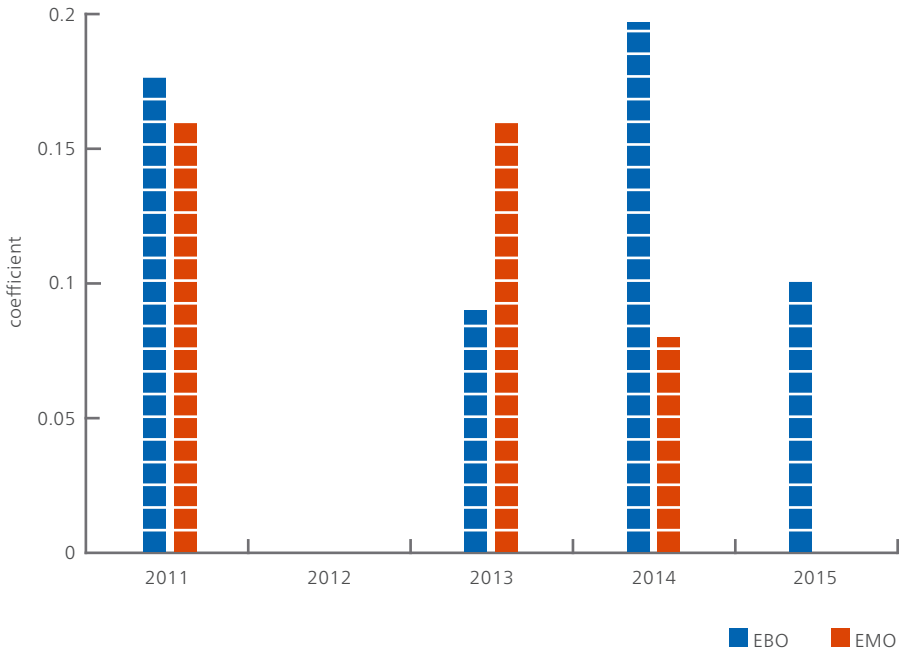
In EBO and EMO2 the fuel tightness is OK.

In EMO1 the increased value in the FRI index indicates a minor leak in the cover of a fuel rod. During the general overhaul of Unit 1 that will take place in 2016, the control of fuel assemblies will be carried out with a view to identifying any leaks or usability of search assembly during further operation of the unit.

4.7 Industrial Safety Accident Rate – ISA

This indicator is defined as number of accidents per 200.000 man-hours worked by the NPP personnel. Contractor´s employees are not included in this indicator.

2014 WANO PWR, 3-yr., median 0.02, best quartile 0.00, best decile 0.00.



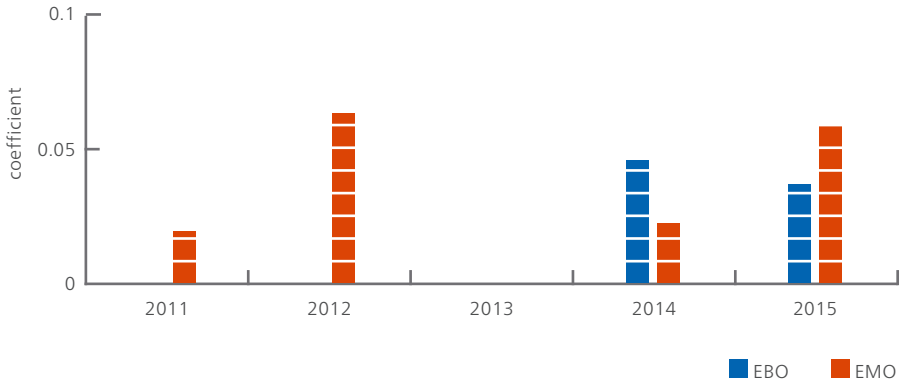
	2011	2012	2013	2014	2015
EBO	0.177	0	0.09	0.197	0.105
EMO	0.160	0	0.16	0.08	0

EBO recorded one occupational accident.
EMO registered zero work accidents.

4.8 Contractor Industrial Safety Accident Rate – CISA

This indicator is defined as number of accidents of all employees of all contractors working in the nuclear installation resulting in lost work time of one or more days (except for the date of the accident) or fatalities per 200.000 worked man-hours

2014 WANO PWR, 3-yr., median 0.05, best quartile 0.00, best decile 0.00.



	2011	2012	2013	2014	2015
EBO	0	0	0	0.456	0.377
EMO	0.19	0.63	0	0.22	0.6

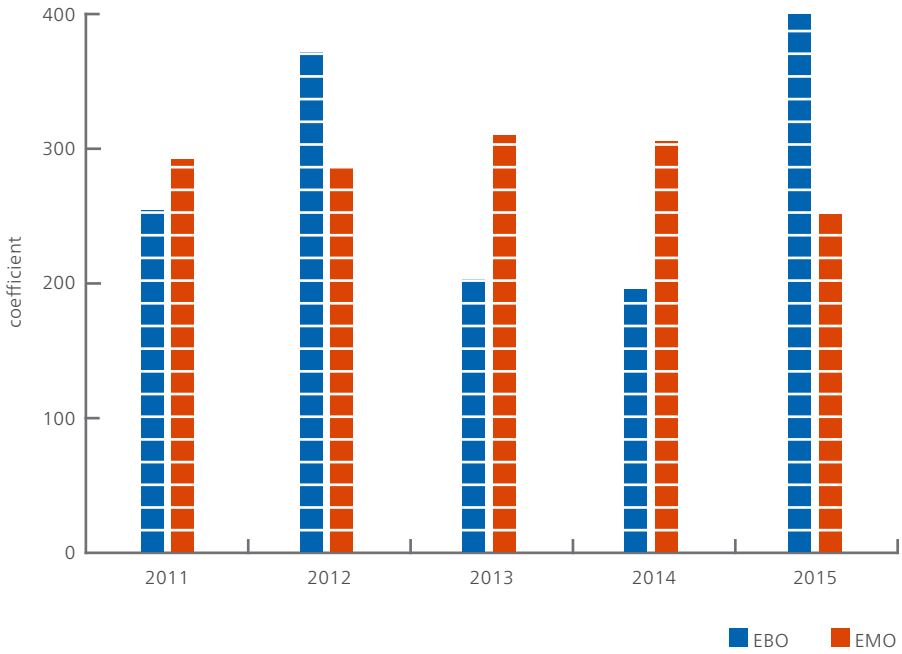
EBO recorded one occupational accident of a contractor's employee.

Over the course of 2015 **EMO** there were three recorded occupational accidents of contractor's employees.

4.9 Collective Radiation Exposure – CRE

This indicator monitors the decreasing trend of the overall radiation exposure of both NPP personnel and contractors. The indicator is a benchmark of radiation protection efficiency and application of the ALARA system (As Low As Reasonably Achievable) aimed at exposure minimization.

2014 WANO, PWR, 3-yr., median 490, best quartile 360, best decile 180.



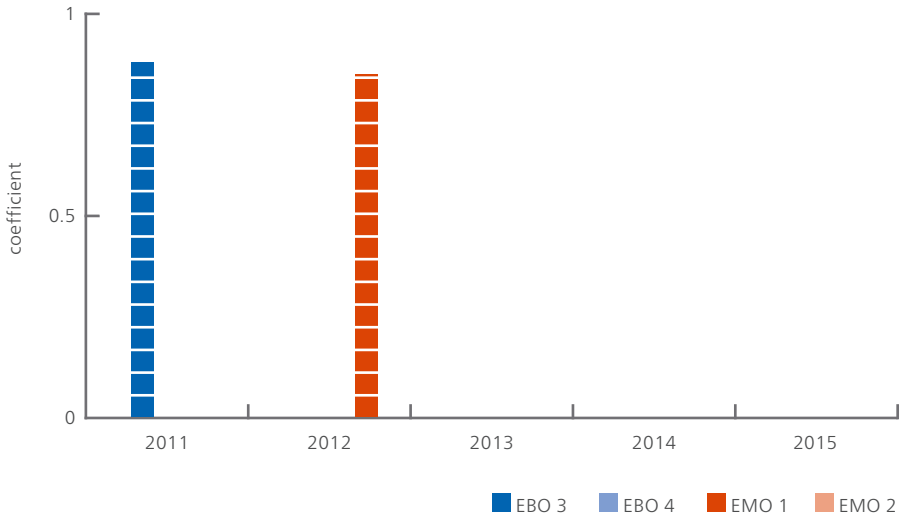
	2011	2012	2013	2014	2015
EBO	254	372	203	194	398
EMO	292	286	318	311	256

Note – KED values for EBO and EMO refer to the entire power plant (two units). WANO values refer to a separate unit.

4.10 Unplanned automatic scrams per 7.000 critical hours

This indicator shows number of unplanned automatic unit scrams caused by AO-1 activation per 7.000 critical reactor hours.

2014 WANO PWR, 3-yr., median 0.00, best quartile 0.00, best decile 0.00.



	2011	2012	2013	2014	2014
EBO3	0.88	0	0	0	0
EBO4	0	0	0	0	0
EMO1	0	0	0	0	0
EMO2	0	0.85	0	0	0

There was no recorded automatic reactor scram recorded in Bohunice and Mochovce nuclear power plants in 2015.

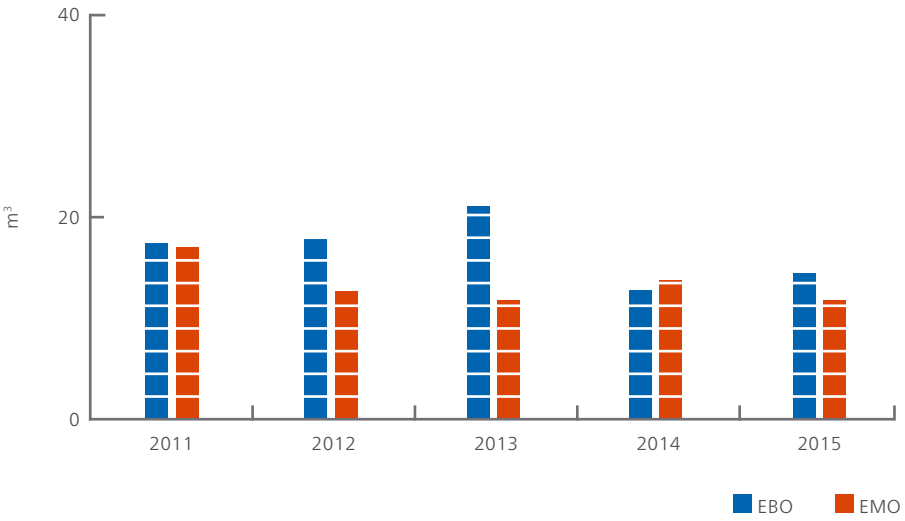
5. Waste production and releases to the atmosphere and hydrosphere

Minimization of generated liquid and solid radioactive waste (RAO) is the main goal of Slovenské elektrárne. The indicators are used to monitor and evaluate operational efficiency of individual units and to evaluate the efficiency of measures adopted to minimize RAW generation, in particular during general overhauls involving refuelling. Decreasing of waste volume also decreases demands on the storage, transport and permanent deposition, thus reducing the NPP impact on the environment. RAW generation is monitored separately for liquid and for solid waste. NPP operation is connected with emissions of liquid and gaseous radioactive material into the environment. Operator´s objective is to minimize such emissions to the environment. Emission values, types of substances and their limit values are defined by the state regulatory authorities.

The waste and emissions management process reviews performed during the year by internal and external environmental inspections confirmed fulfilment of legislative requirements and decisions of the environmental offices.

5.1 Production of liquid RAW

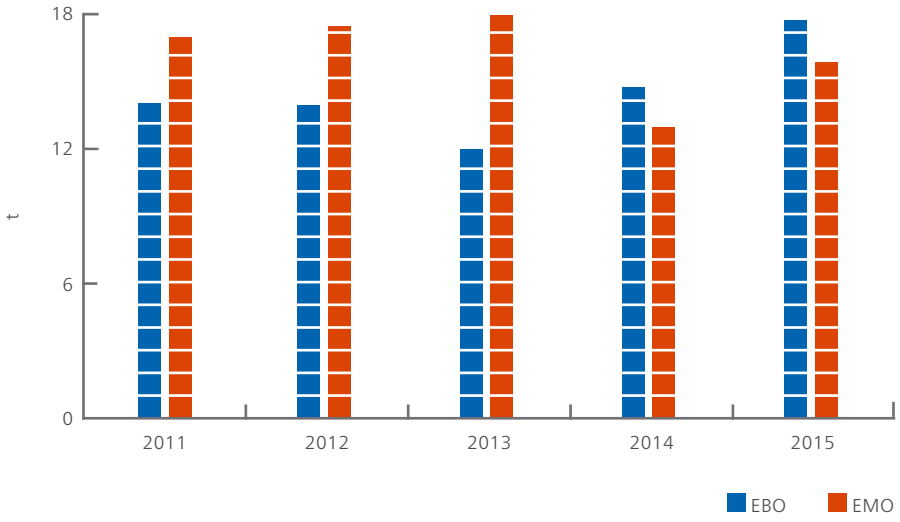
This indicator is defined as volume of liquid RAW in cubic metres generated by the nuclear installation operation converted to the boric acid content of 120g/kg.



	2011	2012	2013	2014	2015
EBO	17.293	17.944	21.052	12.687	15.538
EMO	16.970	12.585	11.714	13.672	11.514

5.2 Production of solid RAW

This indicator is defined as volume of solid RAW in tonnes generated by the nuclear installation operation.

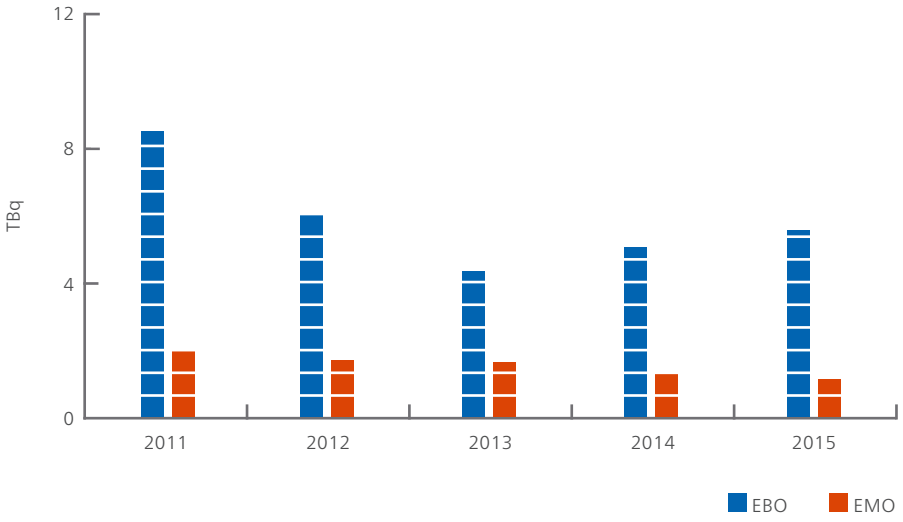


	2011	2012	2013	2014	2015
EBO	14.01	13.93	11.97	14.72	17.60
EMO	16.98	17.46	17.93	12.95	15.34

5.3 Emission to atmosphere in 2014

Installation	Type of release	Activity	Unit	Share on target value for 2015 (%)
EBO	Noble gases	5.7660	TBq	0.2883
EBO	Aerosols	9.3400	MBq	0.0117
EBO	Iodine 131	0.3920	MBq	0.000604
EMO	Noble gases	1.2550	TBq	0.031
EMO	Aerosols	6.9510	MBq	0.0041
EMO	Iodine 131	0.6638	MBq	0.0001

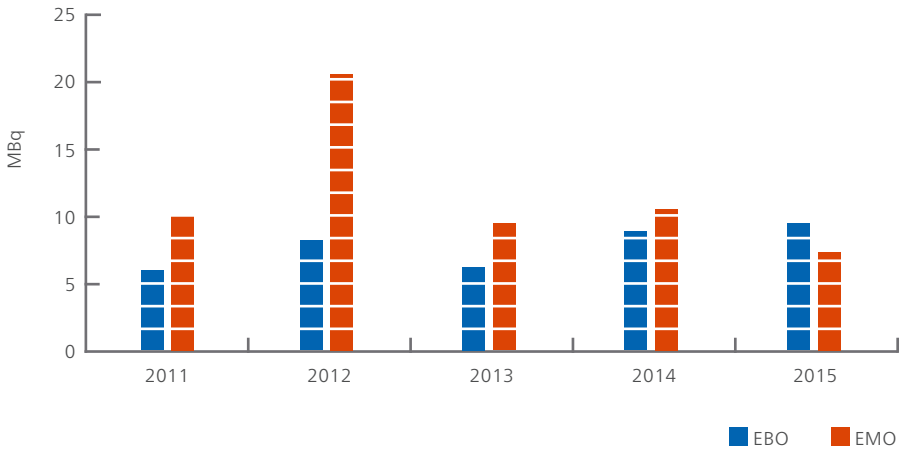
Emission to atmosphere – Noble gases



	2011	2012	2013	2014	2015
EBO	8.508	6.03	4.327	5.039	5.766
EMO	1.946	1.694	1.622	1.277	1.255

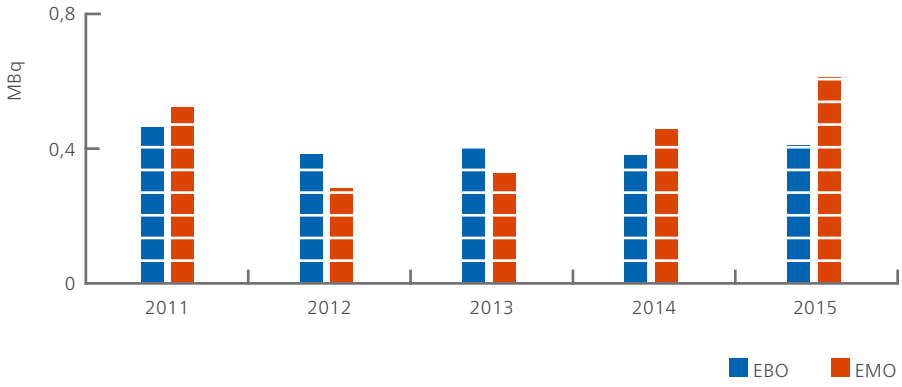
Aerosols and Iodine

Emission to atmosphere – Aerosols



	2011	2012	2013	2014	2015
EBO	5.93	8.17	6.194	8.854	9.34
EMO	10.09	20.575	9.447	10.53	6.951

Emission to atmosphere – Iodine

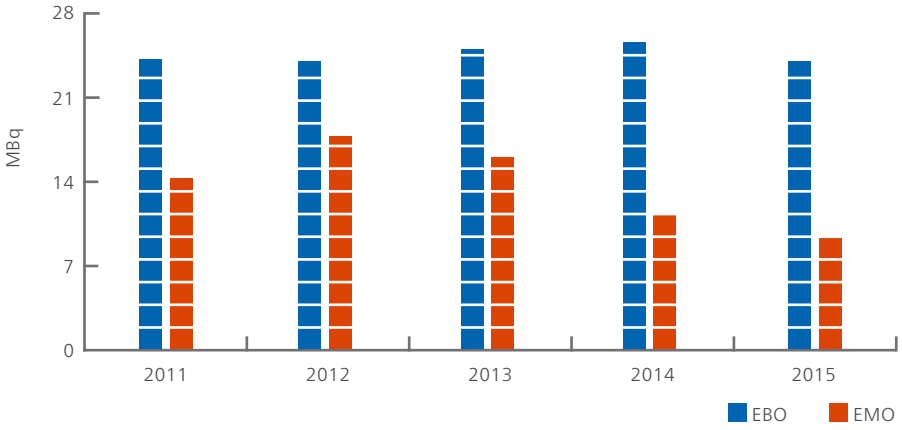


	2011	2012	2013	2014	2015
EBO	0.46	0.38	0.402	0.379	0.392
EMO	0.75	0.28	0.325	0.455	0.6638

5.4 Releases to hydrosphere in 2015

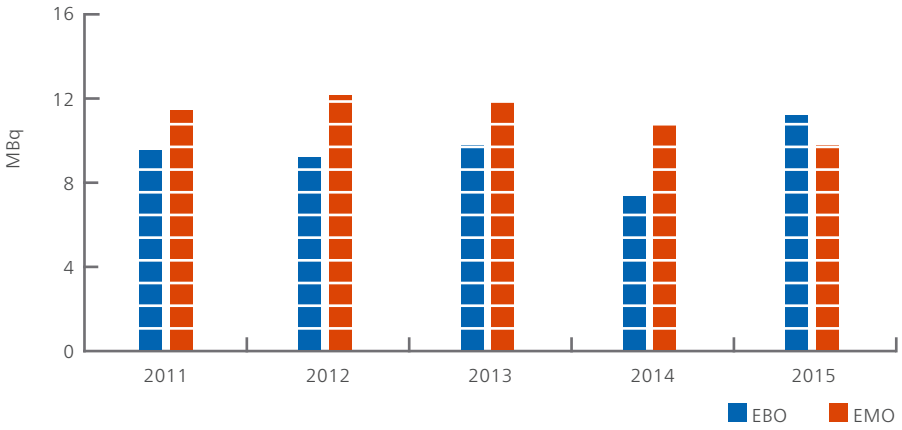
Installation	Type of release	Activity	Unit	Share on target value for 2015 (%)
EBO	Activation and fission products	23.843	MBq	0.183
EBO	Tritium	11.203	TBq	56.01
EMO	Activation and fission products	9.600	MBq	0.873
EMO	Trícium	10.806	TBq	90

Releases to hydrosphere – activation and fission products



	2011	2012	2013	2014	2015
EBO	24.177	23.994	24.970	25.596	23,843
EMO	14.270	17.710	15.960	11.330	9.600

Releases to hydrosphere – tritium



	2011	2012	2013	2014	2015
EBO	9.52	9.19	9.762	7.337	11.203
EMO	11.44	12.13	11.87	10.75	10.806

NPP operation has minimal impact on the environment. This impact is verified by calculation of annual doses to public living in the power plants vicinity using approved conservative method. Calculated maximal values are approximately one hundred times lower than the limit value of 50 micro Sievert defined by the Public Health Authority of SR.

5.5 Surface water intake (m^3)

Rok	EBO	EMO
2011	20,192,550	22,956,812
2012	20,963,176	23,003,000
2013	21,096,662	22,491,000
2014	21,567,885	22,921,000
2015	20,204,682	23,443,251

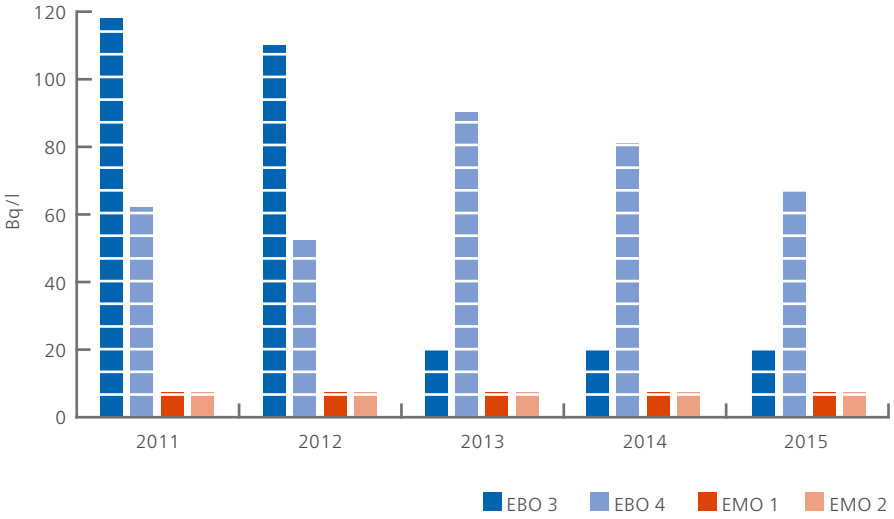
5.6 Wastewater discharge (m^3)

Year		2011	2012	2013	2014	2015
Total volume	EBO	3,249,542	3,544,966	3,615,684	3,623,622	4,051,887
	EMO	5,679,231	5,628,735	4,874,075	5,733,029	6,068,588
Industrial waste waters	EBO	3,192,615	3,494,207	3,552,310	3,623,622	4,010,005
	EMO	5,577,398	5,528,028	4,769,165	5,662,984	6,010,806
Treated sewage waters	EBO	56,927	50,759	63,374	45,933	41,882
	EMO	101,833	100,707	104,910	70,045	57,782
Allowed annual limits of discharged waters for 2 units	EBO			4,200,000		
	EMO			6,000,000		

6. Barrier tightness

6.1 Steam generator blowdown water activity

This indicator is defined as the maximum value of total β-activity of blowdown water dry residue from individual steam generators.



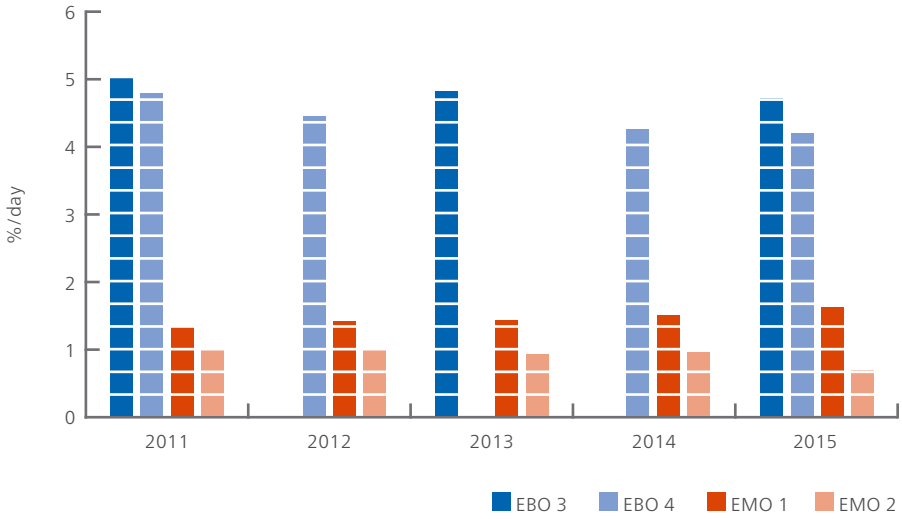
	2011	2012	2013	2014	2015
EBO3	118	110	20	20	20
EBO4	62	52	90	81	66
EMO1	7	7	7	7	7
EMO2	7	7	7	7	7

Small controlled leaks of steam generator tubes were recorded and subsequently removed in both Bohunice NPP units. Activity in the secondary circuit was slightly increased below the value permitted by the NPP L&C which is 370 Bq/l.

In Mochovce NPP the activity of the blow down water in both Units has long been at the lowest possible detection limit of 7Bq/l.

6.2 Containment tightness

This indicator monitors the containment tightness as the third physical barrier against release of the fission products. The indicator is defined as resulting air lost value from the containment for 24 hours given as percentage of the containment volume at over-pressure of 150kPa.



	2011	2012	2013	2014	2015
EBO3	5.01		4.81		4.78
EBO4	4.79	4.44		4.25	
EMO1	1.33	1.41	1.424	1.491	1.488
EMO2	0.98	0.996	0.915	0.946	0.679

Containment tightness is prescribed by NPP L&C. Containment leak rate prescribed for both Bohunice NPP units mustn't exceed the value of 13 % / 24 hours. For Mochovce NPP, this value is 5 % / 24 hours.

Note: In 2015, it was not necessary to perform the leak test in EBO unit 4 required by defined containment criteria.

7. Emergency planning and preparedness

Slovenské elektrárne complies with all requirements for permanent readiness to carry out planned measures in the area of emergency planning in the event of an incident or accident with very low probability of occurrence. The Company's emergency preparedness system is continually maintained and tested.

The main objectives in the area of emergency preparedness is that the readiness of staff and external individuals for successful handling of emergencies are fulfilled, with an emphasis on reducing the risk of an accident or mitigating its consequences, preventing damage to public health and mitigating the risk of effects on human health resulting from emergencies.

In 2015 Slovenské elektrárne performed the following activities to improve the quality of emergency planning:

1. At both sites the Emergency preparedness improvement project was launched, broken down into several areas in accordance with WANO requirements in connection with the gradual implementation of severe accident management at all operating NPP units. The project is planned to be completed in 2016.
2. The functionality of the emergency response organisation (ERO) at both nuclear power plants was reviewed during site emergency drills. A drill at Mochovce and Bohunice nuclear power plants tested the cooperation with the SR Ministry of Defence and SR Ministry of Interior in the area of transporting replacement plant staff, and a line was set up for decontamination of fire-fighting technology, buses and staff.
3. Mochovce NPP implemented a training process of the ERO members and other plant personnel to manage severe accidents, as well as a process of implementing hardware enhancements related to the introduction of new procedures and guidelines for managing severe accidents Theoretical knowledge is tested in practice in the framework of regular ERO exercises and drills.
4. At Bohunice NPP the members of ERO continued to be trained in severe accident management, along with the advancement of the process of implementing hardware enhancements related to the introduction of new procedures and guidelines for managing severe accidents.
5. In accordance with the schedule, measures following from the stress tests have been implemented since 2013 and new measures are being specified to increase the level of emergency preparedness.

The long-term strategic objective of Slovenské elektrárne in the area of emergency preparedness is a continuous improvement of processes using its own experience and that of operators of other power plants around the world.

8. Increasing Safety

The most important safety-related investment projects implemented at Bohunice NPP in 2015 included the following:

- reconstruction of feedwater deaerators at EBO
- modification of boron control and make-up pumps
- modification of air chambers of the DG start-up air
- autonomous cooling of existing DG (independent of ESCW) - Fukushima
- modifications to high-pressure boron make-up pump
- modification of signalling, control and automatics of the containment's hermetic doors
- replacement of pressure measurement sensor for the TG distributor oil
- replacement of electromotors for the oil vapour extraction fan
- control of stator water at TG31 to TG34
- modification of pumps and electromotors for continuous cleaning of condensers

The most important safety-related investment projects implemented at Mochovce NPP in 2015 included the following:

- Reconstruction of DGS automations
- Adjustment of pipeline routes and flange connections on pipeline routes and media outflow to MCP
- Modification of oil piping of MCP electromotor
- Modification of the controlling software for the loading machine for transshipment of fuel assemblies in the reactor with the advanced operating television run (implementation is to continue in the coming years)
- Replacement of ESCW check valves
- Power-supply points for a mobile feedwater source to SG EMO (Fukushima)
- Autonomous cooling of the existing DGs (independent of ESCW)
- Replacement of H_2 and O_2 measurements in the KPL hydrogen recombining system
- Measurement of condensate levels in the air handling unit

9. Overall assessment of nuclear safety of nuclear installations

Based on the assessment of a set of operation safety indicators, the operation of nuclear installations of Slovenské elektrárne in 2015 can be considered safe and complying with legislation concerning the use of atomic energy, while fulfilling the conditions defined in valid permits issued by regulatory authorities. Corrective actions were adopted for events and indicators with negative trend. Operation of Slovenské elektrárne nuclear installations had minimal impact on the environment and minimal radiation exposure of personnel and public.

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