

General Distribution

July 2001

ISOE INFORMATION SHEET

PRELIMINARY EUROPEAN DOSIMETRIC RESULTS FOR 2000

ISOE European Technical Centre - CEPN Information Sheet No. 26

his ISOE Information Sheet presents the European average collective doses per reactor in each country over the past three years (1998-2000) for operating PWRs and BWRs respectively in Tables 1 and 2.

A new country, Slovakia, has been added in the ISOE European region as it became a member of the OECD (four VVER reactors in operation).

The European PWR average collective dose per reactor continues to decrease reaching the lowest dosimetric result, 0.9 man·Sv per reactor (a number of outages stable or increasing in all countries but in France, see Table 3).

It can be noticed that, for the first time, BWRs have had an average dose per reactor lower than 1 man·Sv per reactor. Therefore, BWR average dosimetric results are now very close to PWRs.

It can also be observed that only Spain for BWR and Finland, Germany and France for PWR have had an average collective dose greater than 1 man·Sv per reactor in 2000.

As far as the VVERs reactors are concerned, the average collective dose remains around 0.5-0.7 man·Sv per unit.

The following Figures show VVER, PWR (VVER excluded) and BWR annual average collective dose trend per reactor by country from 1990 to 2000.

Table 1. PWRs average collective dose per reactor by country from 1998 to 2000

Country	Average coll. dose per reactor (man·Sv) 1998 1999 2000		
Belgium	0.71	0.40	0.35
France	1.21	1.17	1.09
Germany	1.01	1.23	1.13
Netherlands	0.68	0.31	0.56
Spain	0.54	0.71	0.59
Sweden	0.59	0.43	0.43
Switzerland	0.46	0.77	0.69
United Kingdom	0.04	0.66	0.46
Sub-Total	1.02	1.03	0.95
Czech Republic	0.34	0.28	0.25
Finland	1.04	0.68	1.13
Hungary	0.76	0.53	0.76
Slovakia	0.98	0.59	0.81
VVER Sub-Total	0.74	0.50	0.68
All PWRs	0.99	0.96	0.91

Table 2. BWRs average collective dose per reactor by country from 1998 to 2000

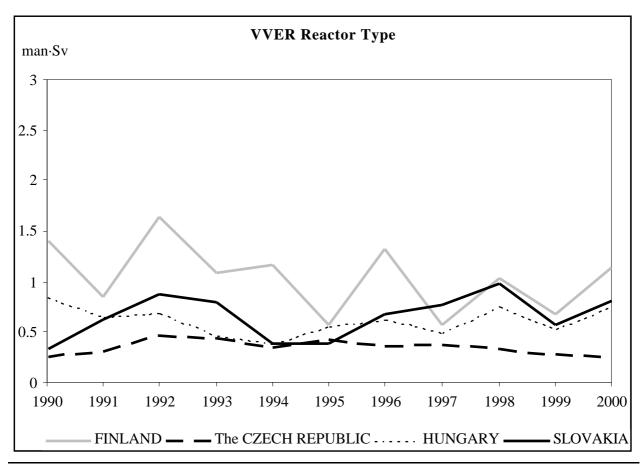
Country	Average coll. dose per reactor (man·Sv) 1998 1999 2000		
Finland Germany Spain Sweden Switzerland All BWRs	1.01	0.47	0.86
	1.56	0.81	0.88
	0.58	2.45	1.47
	1.52	1.12	0.85
	1.37	1.10	0.89

Table 3. Number of outages versus number of operating PWR and BWR reactors from 1998 to 2000

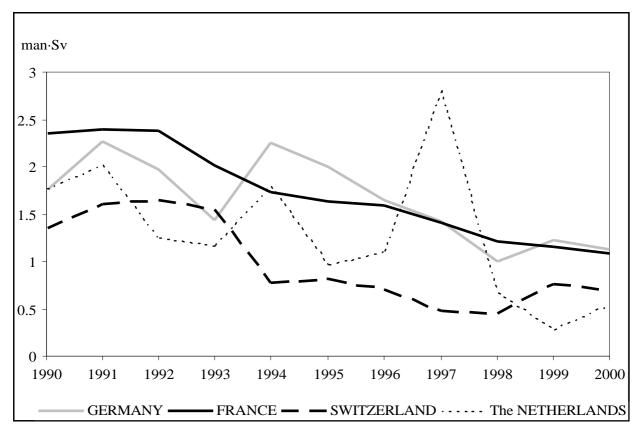
	Number of outages /		
Country	Number of reactors		
	1998	1999	2000
PWR:			
Belgium	7/7	5/7	6/7
France	46/54	50/54	46/54
Germany	12/14	13/14	13/14
Netherlands	1/1	1/1	1/1
Spain	5/7	5/7	6/7
Sweden	3/3	3/3	3/3
Switzerland	2/3	3/3	3/3
United Kingdom	0/1	1/1	1/1
BWR:			
Finland	2/2	2/2	2/2
Germany	6/6	4/6	6/6
Spain	0/2	2/2	1/2
Sweden	9/9	9/9	8/8
Switzerland	2/2	2/2	2/2

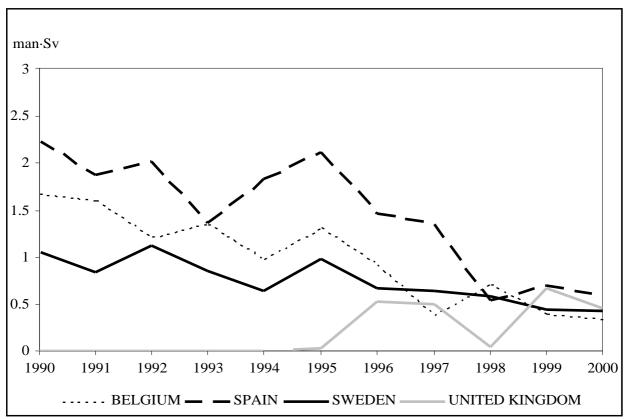
Note: All VVER reactors have had outages every year.

Evolution of PWRs Average Collective Dose per Reactor by Country (1990-2000)



Evolution of PWRs Average Collective Dose per Reactor by Country (1990-2000)





Evolution of BWRs Average Collective Dose per Reactor by Country (1990-2000)

