COMMISSION OF THE EUROPEAN COMMUNITIES

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REPORT FROM THE COMMISSION TO THE COUNCIL

1996 SUMMARY OF INFORMATION RECEIVED ON INVESTMENT PROJECTS OF COMMUNITY INTEREST IN THE PETROLEUM, NATURAL GAS AND ELECTRICITY SECTORS

PART A : INTRODUCTION

0. General

The establishment of a Community energy policy requires a sound knowledge of energy markets. In particular, it is essential to have an overall view on the development of energy investments in the Community. The Council has therefore adopted Council Regulation (EEC) 1056/72[1], as amended by Council regulation (EEC) N° 1215/76[2] which requests the Commission to present annual summaries based on information provided by Member States on investment projects of interest to the Community in the petroleum, natural gas and electricity sectors.

The Commission presented its previous report in April 1996[3], on the situation as on 1.1.94 and 1.1.1995, combined in one report. In April 1996 the Council adopted a recast Regulation[4], in order to facilitate the collection of data and to increase flexibility in the collection of data. A Commission Regulation [5] of December 1996 presented simplified standard questionnaires. This summary will thus be the last report under Council Regulation 1056/72.

The notifications enable the Community to have an overview about planned developments in capacities and equipment in the energy sector. Notification of investment projects under the Regulation backs up similar provisions laid down by the Euratom and ECSC Treaties to provide data for evaluating and, where appropriate, influencing the main developments and trends in these investments.

An introduction is given below to the information gathered under Council Regulation 1056/72. The synthesis of the information is available in Part B.

I. Investments in the Petroleum sector

The refinery sector is still faced with a structural conversion over-capacity. This is due to a rapid increase in catalytic cracking capacity, lightening of the crude-mix processed and

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1 OJ N° L 120, 25.5.72, p. 7

2 OJ N° L 140, 28.5.76, p. 1

3 SEC(96) 488 final.

4 Regulation 736/96 of the Council, OJ N° L 102, 25.4.96, p.1

5 Regulation 2386/96 of the Commission, OJ N° L 326, 17.12.96, p. 13

minor low cost capacity expansions (referred to as "capacity creep"). This situation is likely to lead to closure or sale of refining capacity, a process which to a certain extent has already started.
There is anyway an ongoing need for investments in line with the continuing lightening of the demand barrel. However, with tightening of product specifications and with the strongest product demand growth expected for middle distillates, a gradual shift in the type of cracking capacity from catalytic cracking to hydro-cracking can be expected but was not yet demonstrated by the information received.

1. Atmospheric distillation capacity

The closure of two refineries in Germany during 1995 caused a fall of total European capacity of atmospheric distillation. This loss was, to a certain extent, compensated by additions recorded in Denmark (+1.6 Million ton/year), in France (+1.5 Million ton/year), in Spain (+ 1 Million ton/year) and in Ireland (+ 0.2 Million ton/year), thus limiting the total fall to about 4 Million ton/year to reach a distillation capacity level of 633.8 million ton/year at 1 January 1996 (see annex 1).
Over the years, a relative stability of the total level of atmospheric distillation capacity can be seen as well as an ever increasing utilization rate of this capacity which, for crude oil, rose from 71% in 1986/1987 to 88% in 1995.

2. Conversion capacity

EU conversion capacity developed only slightly in 1995 as Annex 2 testifies. Some capacity increases were recorded mainly in Denmark, Spain, France and in the United Kingdom thus compensating for the reduction in Germany following the closure of the two refineries referred to above. Total conversion capacity accounted for about 32% of distillation capacity.

3. Desulphurization capacity

The Community obligation to market, as from 1 October 1996, diesel fuel at 0.05% sulphur, led European refiners to increase the capacity of middle distillate desulphurization by improving existing or installing new capacity.
Thus, between 1 January 1995 and 1 January 1996, the Community capacity of middle distillate desulphurization passed from 169 to 178 Million ton/year (see annex 3), accounting for approximately 70% of the production of middle distillates by EU refineries. As the fall in sulphur content applies only to road diesel, this percentage seems sufficient to satisfy the Community obligation taking account, on the one hand, of the preponderance of low-sulphur crude and, on the other hand, of the expected growth of desulphurization capacity during 1996 (+ 12 Million ton, cf. table of Annex 4).

II. Investments in the Natural Gas sector

The tables of Annexes 5 to 7 in part B summarise the information provided by Member States, on pipeline infrastructure, LNG terminals and storage facilities in the gas sector. The data for those Member States which have sent complete information show an increase in investment in gas infrastructure, compared to the present situation. This fact could indicate that gas would increase its part in the EU's energy balance in the future.

III. Investments in the Electricity sector

The investment in conventional thermal capacity[6] remains centred in three Member States (I, UK and D), representing about 70 % of the total capacity of conventional thermal plant under construction and planning. Of the total of 38 Gigawatts gross electrical power (GW) of conventional thermal capacity under construction and planning, 60 % was thermal monovalent.

Of the total of 21 GW of plants known to be currently under construction, 6 GW was capable of burning solid fuel whilst 8 GW was capable of burning oil and 17 GW was capable of burning natural gas. (double counting due to bivalent capacity).
The total capacity of plants under construction and planning, capable of burning natural gas has decreased (-1.7 GW) compared to the situation at 1.1.95 but natural gas continues to be the dominant fuel being able to supply 73.0 % of the total capacity under construction or planned.
For all the 17 GW in planning, the decisional process was not completed and for 46 % the decisional status is unknown or not reported

The total nuclear capacity in service in the European Union at 1.1.96 was 130 GW. Subject to the achievement of current construction schedules, total nuclear capacity in service by 1998 is now expected to be 135 GW. Only France reported (4) nuclear plants under construction of 6 GW in total. No nuclear plants were reported in planning.

The total hydro-electric capacity under construction and planned decreased 7 % compared with the situation at 1.1.1995 (EUR 12). Of the 5 GW under construction and planning 42 % was mixed pumped storage/primary conversion and 58 % was primary conversion and others.

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[6] - The power plant information relate only to thermal power plant of 200 MW and above and hydro plant of 50 MW and above;

About 10.847 km of transmission lines were under construction (2.829 km) or planned (8.010 km). These were mainly overhead lines (9.259 km) and underwater cables (1.312 km), the contribution of underground cables (276 km) remaining limited.

PART B : SYNTHESIS OF INFORMATION

Annexes covering the data received

Part B sets out data received by the Commission from the Member States on the investment situation in the three sectors concerned as at 1 January 1996

LIST OF ANNEXES

Annex 1

OIL
Refining capacity in the E.U. at 1.1.1996
(capacity in service in million tons per annum)

	ATMOS. DIST.	REFOR.	HYDRO CRACK	CAT. CRACK.	THERM. CRACK.	VIS-BREAK.	COKING
BE	32.9	4.9	-	5.8	-	3.7	-
DK	10.8	2.0	-	-	2.1	2.1	-
DE	104.8	17.1	8.3	14.7	3.9	10.9	5.0
EL	18.5	2.1	1.5	3.3	-	2.6	-
ES	62.0	8.0	0.8	9.0	-	8.4	1.7
FR	91.9*	11.0	0.7	18.6	-	8.1	-
IR	2.7	0.5	-	-	-	-	-
IT	103.3	12.1	7.1	14.7	5.9	15.9	2.6
NL	59.6	7.3	5.1	7.5	3.1	4.1	2.1
PO	14.4	2.2	0.5	1.7	-	1.4	-
UK	90.9	16.7	2.5	23.7	2.8	3.1	3.6
SF	11.0	2.1	1.1	2.7	-	1.9	-
SV	21.0	3.2	-	1.5	1.4	2.3	-
OS	10.0	1.4	-	1.3	0.3	1.0	-
EU	633.8	90.6	27.6	104.5	19.5	65.5	15.0

* of which 5.9 mta in reserve, immediately useable

Annex 2

OIL
Conversion capacity
(million metric tons/year)

	1985	1990	1995	1996
Cat. Cracking	88.0	88.2	104.2	104.5
Visbreaking	52.0	63.8	65.5	65.5
Hydrocracking	11.0	23.2	27.8	27.6
Therm. Crack. } Coking } Flexicoking }	27.8	28.0	34.3	34.5
Total Capacity	178.8	203.2	231.8	232.1
Catcrack. Equiv.*	146	171	200	200
As % CDU capacity	21	28	31	32

* Ratios used are :
Visbreaker 0.33 - Hydrocracker 1.3 - Thermal Cracker 0.65 - Coker 1.7

Annex 3

OIL - Desulphurisation capacity of middle distillates
(million metric tons/year)

	1.1.1995	1.1.1996
BE	12.4	12.1
DK	2.4	4.3
DE	27.8	34.0
EL	3.8	3.8
ES	16.4	16.4
FR	24.0	24.7
IR	0.3	0.3
IT	27.1	27.1
NL	15.2	15.2
PO	2.6	2.6
UK	23.0	23.0
SF	3.7	3.7
SV	6.3	6.3
OS	4.2	4.6
EU	169.2	178.1

Annex 4

OIL

Future changes in the refining capacity

(Thousand metric tons/year)

	1996	1997	1998	After or date not defined
Atmos. Dist.	+ 1060	+ 4140		+ 1300
Reforming	- 600	+ 130	+ 450	
Hydrocrack.		+ 600		
Cat. Crack.		+ 1800	+ 4500	+ 200
Therm.crack.				
Visbreaking		- 300		+ 100
Coking				
Desulphuris. of Mid. Dist.	+ 11863	+ 3535		+ 300

GAS

- Pipelines - Length of pipelines in kms, diameter above 300mm,

COUNTRY	EXISTING	UNDER CONSTRUCTION	PLANNED
BELGIUM	943	NONE	Connection of the UK/Continent
GERMANY	16232	301	789
DENMARK	969	NONE	NONE
GREECE	511	109	321
SPAIN	? & N/A	? & N/A	? & N/A
FRANCE	? & N/A (constructed in 1995	910	176
IRELAND	1004	NONE	NONE
ITALY	703	356	165
LUXEMBOURG	NONE	?	?
NETHERLANDS	? & N/A	? & N/A	? & N/A
AUSTRIA	927	66	220
PORTUGAL	?	375	282
FINLAND	800	80	77
SWEDEN	?	?	?
UNITED KINGDOM	?	?	?
TOTAL EU	N/A	N/A	N/A

CODING EXPLANATION :
? : the questionnaire was not sent, or the appropriate parts of the questionnaire were not filled in.
N/A : impossible to calculate

Annex 6

GAS -LNG Plants

LNG storage capacity and max. regasification capacity (in m^3 and m^3 /hour).

COUNTRY	EXISTING	UNDER CONSTRUCTION	PLANNED
BELGIUM	261.000/7.000.000	NONE	NONE
GERMANY	NONE	NONE	WILHELMSHAVEN :240.000/1.200.000
DENMARK	?	?	?
GREECE	NONE	REVITHOUSSA 2x65000/?	NONE
SPAIN	? & N/A	? & N/A	? & N/A
FRANCE	?	?	?
IRELAND	?	?	?
ITALY	?	?	?
LUXEMBOURG	NONE	NONE	NONE
NETHERLANDS	?	?	?
AUSTRIA	NONE	NONE	NONE
PORTUGAL	?	?	?
FINLAND	NONE	NONE	NONE
SWEDEN	?	NONE	NONE
UNITED KINGDOM	NONE	NONE	NONE
TOTAL EU	N/A	N/A	N/A

CODING EXPLANATION :

? : the questionnaire was not sent, or the appropriate parts of the questionnaire were not filled in.

N/A : impossible to calculate

GAS - Storage facilities,
overall capacity and useful capacity (in mcm).

COUNTRY	EXISTING	UNDER CONSTRUCTION	PLANNED
BELGIUM	890/490	NONE	1200/650
GERMANY	16866/10298	9536/5302	9934/5966
DENMARK	615/300	965/390	165/90
GREECE	?	?	?
SPAIN	? & N/A	? & N/A	? & N/A
FRANCE	20540/9030	?	4900/1254
IRELAND	?	?	?
ITALY	2248/1350	1542/1000	1002/850
LUXEMBOURG	NONE	NONE	NONE
NETHERLANDS	?	?	?
AUSTRIA	4640/2320	1800/1000	1000/500
PORTUGAL	NONE	NONE	360/270
FINLAND	NONE	NONE	NONE
SWEDEN	NONE	NONE	NONE
UNITED KINGDOM	9669/3170	NONE	110/61
TOTAL EU	N/A	N/A	N/A

CODING EXPLANATION :
? : the questionnaire was not sent, or the appropriate parts of the questionnaire were not filled in.
N/A : impossible to calculate

ELECTRICITY
Total Power plants under construction and planned (GW) ; development 1989-96.

		Conventional Thermal	Nuclear	Hydro	Total
EUR-12	1.1.89	26,879	25,352	7,082	59,313
	1.1.90	23,292	15,583	6,400	45,275
	1.1.91	34,388	11,621	6,594	52,603
	1.1.92	52,552	10,259	5,453	68,264
	1.1.93	47,513	10,031	5,266	62,810
	1.1.94	45,488	7,130	4,536	57,154
	1.1.95	39,037	7,130	4,264	50,431
	1.1.96	37,890	5,810	4,594	48,596
EUR-15	1.1.95	39,776	7,130	5,257	52,163
	1.1.96	38,370	5,810	4,896	49,076

Annex 9

ELECTRICITY
Conventional Thermal plants by fuel
MW gross

Capable of burning	Commissione in 1995	Under cons-truction A	In planning to be in service by 2000 B	In planning to be in service after 2000 and date unknown C	TOTAL A+B+C
1.Hard coal	308	3242	0	1395	4637
- of which coal only	308	1085	0	435	1520
2.Brown coal	0	3070	300	1278	4648
3.Oil	2670	7680	2900	3360	13940
- of which oil only	0	0	260	0	260
4.Natural gas	3846	16608	9019	2400	28027
- of which natural gas only	1176	8942	6379	0	15321
5.Fuel unknown or undecided	0	0	2000	0	2000

Annex 10

ELECTRICITY
Nuclear plants
MW gross

Scheduled to be in service	Commissioned in 1995	Under construction	Planned
By 1998		5,810	0
By 1999-2001		0	0
After 2001		0	0
Totals	1,320	5,810	0

Annex 11

ELECTRICITY
Hydro plants
MW gross

	Commissioned in 1995	Under Construction	In planning
Primary conversion(1)	249	1,073	1,782
Pumped storage	0	240	120
Mixed pumped storage/ primary conversion	0	681	1,000
Totals	249	1,994	2,902

(1) Includes run-of-river, seasonal and short-term storage and unknown.

ELECTRICITY
Transmission lines and cables

transmission lines for a voltage of 345 kV or more and underground and sub-marine transmission cables for a voltage of 100 kV or more.

Circuit km

	Commissioned in 1995	Under Construction	Planned
Overhead lines	826	2,728	6,531
Underground cables	22	57	219
Underwater cables	0	44	1,268
Totals	848	2,829	8,018

ELECTRICITY

Power stations; installed, under construction and projected

(Position at 1.1.96)

- GW gross -

	EUR-15	BEL	DEN	D	ES	F	EL	IRL	I	L	NED	P	UK	A	FIN	SWE
A. INSTALLATED CAPACITY [1]																
(All generating sets)	552.1	15.7	9.6	124.0	45.8	116.2	9.3	4.1	65.7	1.3	19.8	10.0	77.3	14.0	11.1	28.2
of which:																
1. Conventional thermal	313.1	8.4	9.6	91.4	21.4	25.7	6.8	3.6	45.8	0.1	19.3	5.3	58.7	4.4	6.3	6.2
2. Nuclear	129.8	5.9		23.9	7.4	65.4					0.5		14.4		2.3	10.0
3. Hydroelectric	109.2	1.4		8.7	17.0	25.1	2.5	0.5	19.9	1.1		4.7	4.2	9.7	2.5	12.0
B. PLANT UNDER CONSTRUCTION [2]																
Thermal (generating sets of 200 MW or more)	27.0	0.8	0.9	4.6	0.8	6.1	0.9	0.5	4.1		2.1	1.0	4.8		0.5	
of which:																
1. Conventional thermal	21.2	0.8	0.9	4.6	0.8	0.3	0.9	0.5	4.1		2.1	1.0	4.8		0.5	
2. Nuclear	5.8					5.8										
3. Hydroelectric (generating sets of 50 MW or more)	2.0				0.2		0.7		0.5			0.4		0.2		
C. PROJECTED [2]																
Thermal (generating sets of 200 MW or more)	17.2	0.4		1.7	1.8		0.7		6.5		0.8		5.3			
of which:																
1. Conventional thermal	17.2	0.4		1.7	1.8		0.7		6.5		0.8		5.3			
2. Nuclear	0.0															
3. Hydroelectric (generating sets of 50 MW or more)	2.9				0.2		0.4		2.0			0.2		0.1		

[1] Source : estimated on the basis of figures of EUROSTAT/publications (provisional data).

[2] Source : notifications received by the Commission by virtue of Council Regulations N° 1056/72 and 1215/76.

Annex14

ELECTRICITY
THERMAL POWER STATIONS
(Including nuclear power stations)
Generating sets with a capacity of 200 MW or more
By country and planned year of commissioning
Position at 1.1.96
Pairs of figures : number of sets and MW of total capacity

COUNTRY	Commissioned during 1995	Total		of which : planned year of commissioning (under construction and planned)										
		Under Construction	Planned	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	unknown
EUR-15	9-5474	50-26998	43-17182	19-8364	15- 9618	19-11189	12-4506	12-4110	8-3243	2-570	4-1600	2-980		
EUR-12	9-5474	49-26518	43-17182	19-8364	14-9138	19-11189	12-4506	12-4110	8-3243	2-570	4-1600	2-980		
of which :														
Belgique		2-810	1- 350		2-810	1-350								
Denmark		2-861				1-436	1-425							
BR Deutschland		8-4555	3-1713	4-1830	2-807	1-365	1-933	1-920	2-1413					
España		2-835	5-1810	1-318	2-894		4-1433							
France		5-6060		1-250	3-4360	1-1450								
Hellas		3-926	2-670		1-367	2-560		1- 370			1-300			
Ireland		1-470					1-470							
Italy	2-1010	8-4100	22-6538	1-660	2-1010	2-1028	4-1015	8-2245	6-1830	2-570	3-1300	2-980		
Luxembourg														
Netherlands	2-496	7-2130	3-805	6-1900	1-230		1-230	2-575						
Portugal	1-308	3-1005				3-1005								
United Kingdom	4- 3660	8-4766	7-5296	6-3406	1-660	8-5996								
Austria														
Finland		1- 480			1-480									

Annex 15 a

ELECTRICITY

Thermal power stations (Under Construction)

Conventional (C) and Nuclear (N)

Generating sets with a capacity of 200 MW or more. By country and by type of cooling system.
Postion at 1.1.96. Pairs of figures: Number of sets and MW of total capacity.

Country	Total Power plant under construction	By cooling sytem					
		Fresh water	River	River + Tower	Sea or estuary	Tower	Other & Unknown
EUR-15 (C) (N)	46-21188 4-5810	7-3476			19-8233	13-6825 4-5810	7-2654
Eur-12 (C) (N)	45-20708 4-5810	6-2996			19-8233	13-6825 4-5810	7-2654
Belgium (C)	2-810					2-810	
Denmark (C)	2-861	2-861					
BRD (C)	8-4555	4-2135				2-1345	2-1075
Spain (C)	2-835				1-517		1-318
France (C) (N)	1-250 4-5810					1-250 4-5810	
Greece (C)	3-926						3-926
Ireland (C)	1-470				1-470		
Italy (C)	8-4100				7-3750	1-350	
Netherlands (C)	7-2130				7-2130		
Portugal (C)	3-1005					2-670	1-335
United Kingdom (C)	8-4766				3-1366	5-3400	
Finland (C)	1-480	1-480					

Annex 15 b

ELECTRICITY

Thermal power stations (Projected plants)

Conventional (C) and Nuclear (N)

Generating sets with a capacity of 200 MW or more. By country and by type of cooling system.
Postion at 1.1.96. Pairs of figures: Number of sets and MW of total capacity.

Country	Total Power plant Projected	By cooling sytem					
		Fresh water	River	River + Tower	Sea or estuary	Tower	Other & Unknown
EUR-15 C N	43-17182	6-2203	2-500	1-750	13-3726	11-5013	10-4990
Eur-12 C N Of which	43-17182	6-2203	2-500	1-750	13-3726	11-5013	10-4990
Belgium (C)	1-350					1-350	
Denmark (C)							
BRD (C)	3-1713	2-735				1-978	
Spain (C)	5-1810						5-1810
France (C) (N)							
Greece (C)	2-670						2-670
Ireland (C)							
Italy (C)	22-6538	4-1468	1-270		10-2700	6-1840	1-260
Netherlands (C)	3-805		1-230		2-575		
Portugal (C)							
United Kingdom (C)	7-5296			1-750	1-451	3-1845	2-2250
Finland (C)							

ELECTRICITY

PROJECTED THERMAL POWER STATIONS - Decisional aspects

Generating sets with a capacity of 200 MW or more
Situation 1.1.96
Pairs of figures : number of sets and MW of total capacity

COUNTRY	Fuel	Total projected	Firm (decided)	Decisional process uncompleted	of which decisions have NOT been taken for						Possible in study	Status unknown or not reported
					Site	Main contractor	Capacity	Type of fuel	Start of work date	Commi-ssioning		
EUR - 15 (all conventional)		43-17182		25-8964		14-4555	3-760	5-1698	2-1500	1-451	1-350	17-7868
EUR - 12 (all conventional		43-17182		25-8964		14-4555	3-760	5-1698	2-1500	1-451	1-350	17-7868
of which :												
Belgique												
	NGAS (NATURAL GAS)	1- 350										1-350
B.R.Deutschland												
	COAL (STEAM COAL)	1- 435										1- 435
	LIGN (LIGNITE & PEAT)	2-1278										2-1278
España												
	NGAS	5-1810										5-1810
Hellas												
	LIGN (LIGNITE & PEAT)	1-300										1- 300
	OIL/NGAS	1-370										1- 370
Italy												
	OIL (OIL)	1- 260										1- 260
	NGAS (NATURAL GAS)	1- 368		1-368				1- 368				
	DGAS (DERIVED GASES)	2- 530		1- 270				1 - 270				1- 260
	OIL/NGAS	15-4420		14-4070		9-2570	2-440	3-1060			1-350	
	COAL/OIL	3- 960		3- 960		2- 640	1-320					
Netherlands												
	NGAS	3- 805										3-805
United Kingdom												
	NGAS	5- 3046		5-3046		2-1095			2-1500	1-451		
	UNKNOWN	1- 2000										1-2000
	OIL/NGAS	1- 250		1- 250		1- 250						

ELECTRICITY
CONVENTIONAL THERMAL POWER STATIONS
(Generating sets with a capacity of 200 MW or more excluding nuclear)
Pairs of figures : MW of corresponding total capacity and Number of sets between brackets

	In service	Under construction	Planned
A1. <u>POSITION AT 1.1.1995</u>		19504(42)	19672(47)
B1. EVOLUTION DURING 1995			
1. Plant commissioned	4154(8)	- 4154(-8)	
2. Beginning of construction (plant reported planned at1.1.95)		2381(5)	- 2381(- 5)
3. Projects withdrawn	- 1170(- 2)		(- 1709)(- 5)
4a. New projects not reported planned at 1.1.95		3845(8)	1385(5)
4b. Construction halted (conversion a.o), returned to planning phase		- 230(- 1)	230(1)
5. Size modifications, adjustments		- 158(9)	- 15(6)
A2. <u>POSITION AT 1.1.96</u>		21188(46)	17182(43)

Annex 18

ELECTRICITY

Nuclear Power Stations by planned year of commissioning

Position at 1.1.96
Pairs of figures : number of sets and MW of total capacity

COUNTRY	Commissioned during 1995	Total		of which : planned year of commissioning (under construction and planned)											
		Under Construction	Planned	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	>2005	unknown
EUR-15	1-1320	4-5810			3-4360	1-1450									
EUR-12	1-1320	4-5810			3-4360										
of which :															
France		4-5810			3-4360	1-1450									
U.K.	1-1320														

ELECTRICITY
NUCLEAR POWER STATIONS
By reactor type, country and size of sets
Situation at 1.1.96

Pairs of figures : number of sets and MW of total capacity

Reactor type	Country	Size of sets MWe	Total	Under construction	Planned
TOTAL OF ALL TYPES of which :	EUR TOTAL		4-5810	4-5810	0-0
PRESSURIZED WATER	France	1455 1450	2-2910 2-2900	2-2910 2-2900	

ELECTRICITY
BALANCE SHEET OF INVESTMENT PROJECTS IN NUCLEAR POWER STATIONS IN THE EUROPEAN UNION

(Generating sets with a capacity of 200 MW or more)

Pairs of figures : MW of corresponding total capacity and Number of sets between brackets

	In service	Under construction	Planned
A1. POSITION AT 1.1.1995		7130(5)	
B1. EVOLUTION DURING 1995			
1. Plant commissioned	- 1320 (1)	- 1320 (1)	
2. Beginning of construction (plant reported planned at 1.1.95)			
3. Projects withdrawn			
4a. New projects not reported planned at 1.1.95			
4b. Construction halted (conversion a.o), returned to planning phase			
5. Size modifications, adjustments			
A2. POSITION AT 1.1.96		5810(5)	

ELECTRICITY

HYDRO-ELECTRIC POWER STATIONS BY CATEGORY OF PLANT, PLANNED YEAR OF COMMISSIONING AND BY COUNTRY

Generating plants of 50 MW or more
By country and planned year of commissioning
Position at 1.1.96
Pairs of figures : number of sets and MW of total capacity

Country and category	Commissioned during 1995	Total		of which planning year of commissioning (under construction and planning)							
		under construction	planned	1996	1997	1998	1999	2000	2001	>2001	unknown (1)
EUR - 15	2-249	18-1994	28-2902		5-538	5-535	3-351	2-150	5-755	26-2567	
of which :											
Seasonal storage		8-711	3-288		3-300	4-260	1-151			3-288	
Short-term storage	1-59		7-583						2-222	3-361	
Run-of-river	1-190	1-182	5-551		1-182				2-293	3-258	
Pumped storage		1-240	1-120						1-240	1-120	
Seasonal st + pumped st.		4-531			1-56	1-275	2-200				
Short-term + pumped st		2-150	8-1000					2-150		8-1000	
Unknown or not reported		2-180	4-360								6-540
EUR - 12	2-249	17-1812	27-2782		4-356	5-535	3-351	2-150	5-755	25-2447	
of which :											
Seasonal storage		8-711	3-288		3-300	4-260	1-151			3-288	
Short-term storage	1-59		7-583						2-222	5-361	
Run-of-river	1-190		5-551						2-293	3-258	
Pumped storage		1-240							1-240		
Seasonal st + pumped st.		4-531			1-56	1-275	2-200				
Short-term + pumped st		2-150	8-1000					2-150		8-1000	
Unknown or not reported		2-180	4-360								6-540

Country and category	Commissioned during 1995	Total		of which planning year of commissioning (under construction and planning)							
		under construction	planned	1996	1997	1998	1999	2000	2001	>2001	unknown (1)
Espana											
Seasonal storage		1-151					1-151				
Short-term storage									1-150		
Hellas											
Seasonal storage		7-560			3-300	4-260					
Unknown or not reported		2-180	4-360								6-540
Italy											
Seasonal storage			3-288							3-288	
Short-term storage	1-59		6-433						1-72	5-361	
Run-of-river			4-316						1-58	3-258	
Seasonal st + pumped st.		3-387			1-56	1-275	1-56				
Short-term + pumped st		2-150	8-1000					2-150		8-1000	
Portugal											
Run-of-river	1-190		1-235						1-235		
Pumped storage		1-240							1-240		
Seasonal st + pumped st.		1-144					1-144				
Austria											
Run-of-river		1-182			1-182						
Pumped storage			1-120							1-120	

(1) Dates not yet decided or unknown; projects in study or probable projects; programme is tentative.

ELECTRICITY
- BALANCE SHEET OF INVESTMENT PROJECTS
IN HYDRO-ELECTRIC POWER STATIONS
IN THE EUROPEAN UNION
(Generating sets with a capacity of 50 MW or more)
Pairs of figures : MW of corresponding total capacity and Number of sets between brackets

	In service	Under construction	Planned
A1. POSITION AT 1.1.1995		1821(17)	3436(28)
B1. EVOLUTION DURING 1995			
1. Plant commissioned	249(2)	- 249(-2)	
2. Beginning of construction (plant reported planned at 1.1.95)		132(2)	- 132(-2)
3. Projects withdrawn			760(- 2)
4.New projects not reported planned at 1.1.95		240(1)	330(4)
5. Size modifications, adjustments		51(6)	28(3)
A2. POSITION AT 1.1.96		1993(18)	2902(28)

Annex 23

ELECTRICITY
TRANSMISSION LINES AND CABLES
By country and planned year of commissioning
Position at 1.1.96
Underground (u), Overhead (o) and Submarine (s)

Circuit - Km

Country	Voltage (kV)	Commissioned during 1995	Total		of which planning year of commissioning (under construction and planning)								
			under construction	planned	1996	1997	1998	1999	2000	2001	2002	>2002	unknown (1)
Belgique	150((u)		17.0	16.3	15.2	1.8							16.3
	380(o)		79.9	117.0	37.9	33.0	66.0						60.0
Denmark	400(o)	7.0		157.0		7.0	50.0		100.0				
BR Deutschland	420(s)			550.0								550.0	
	110(u)	0.1											
	110(o)			76.7		12.1	19.0		40.0	5.6			
	380(o)	80.2	92.6	502.3	97.0	92.7	132.3	174.3	40.0	58.6			
	420(o)	7.6	6.5	18.0		6.5			18.0				
Espana	400(s)		26.0		26.0								
	400(o)	48.0	1435.0	61.0	462.0	297.0	6.0	581.0	150.0				

Country	Voltage (kV)	Commissioned during 1995	Total		of which planning year of commissioning (under construction and planning)								
			under construction	planned	1996	1997	1998	1999	2000	2001	2002	>2002	unknown (1)
France	220(u)	21.5	39.8	161.9	39.8	93.5	68.4						
	400(o)	127.0	108.0	990.0	108.0	14.0	71.0	137.0	413.0	260.0	95.0		
Hellas	150(s)		17.9	18.2		17.9	18.2						
	400(s)			160.0				160.0					
	400(o)	287.0	81.0	456.0			132.0	213.0	40.0			71.0	
Ireland	220(u)			13.0				13.0					
Italy	380(o)	150.9	416.5	1513.3	438.5	127.0	448.9	54.4	206.0	211.10	197.0	247.0	
	400(o)			45.0				45.0					
Netherlands	450(s)			540.0						540.0			
	380(o)			125.2	125.2								
Portugal	220(u)			12.0			6.0		6.0				
	400(o)	1.8	61.5	445.8	61.5	36.8	81.0	174.0	86.0	68.0			

Country	Voltage (kV)	Commissioned during 1995	Total		of which planning year of commissioning (under construction and planning)								
			under construction	planned	1996	1997	1998	1999	2000	2001	2002	>2002	unknown (1)
U.K.	275(u)			2.8		1.0		1.8					
	400(u)		0.2	5.0	0.2	5.0							
	400(o)	46.8	186.9	1004.9	124.4	172.0	227.0	246.4	263.0	195.0			
Austria	110(u)			7.6		3.1						4.5	
	380(o)	70.0		519.3					256.6		97.0	144.0	21.7
Finland	400(o)		260.0	499.0	40.0	19.0	190.0	30.0	140.0	230.0		110.0	