통상산업부 공고 제1995-174호
(1996. 1. 4)

'95 長期電力需給計劃

(1995 ~ 2010)

1995. 12.

通商産業部
電力政策課

1. 年度別 發電設備 建設計劃

연도	월	발 전 소 명		시설용량 (MW)	최대수요 (MW)	설 비 예비율 (%)
1994		기 존 설 비		28,772 (28,750)	26,696	7.8 [2.8]
1995	3	영광원자력#3	1000.0	31,793 (32,184)	29,878	6.4 [7.0]
	4	무주양수#1,2	600.0			
	6	경천소수력	0.8			
	6	태안화력#1	500.0			
	6	일산복합증설(G/T)	200.0			
	6	울산1복합증설(G/T)	200.0			
	6	분당복합증설(G/T)	225.0			
	6	한화복합(G/T#1)	300.0			
	6	한림복합(G/T#1)	35.0			
	8	폐지-한림GMC	-17.0			
	9	폐지-울산1복합(G/T)	-110.0			
	12	추자도내연	0.5			
	12	태안화력#2	500.0			
1996	3	일산복합증설(S/T)	100.0	35,723 (35,702)	32,603	9.6 [3.4]
	3	영광원자력#4	1000.0			
	4	흑산도내연	1.5			
	6	조도내연	1.0			
	6	울릉도내연	1.5			
	6	서인천3단계(G/T)	600.0			
	6	서인천4단계(G/T)	600.0			
	6	울산2복합(G/T)	600.0			
	6	한림복합(G/T#2)	35.0			
	6	한화복합(G/T#2)	300.0			
	6	한화복합(G/T#3)	300.0			
	9	폐지-제주화력외	-172.4			
	10	반변소수력	1.0			
	11	한화복합(S/T#1)	150.0			

(주) ( )내는 연말기준, [ ]내는 공급예비율임

연도	월	발 전 소 명		시설용량 (MW)	최대수요 (MW)	설 비 예비율 (%)
1997	1	폐지-부산#1,2	-120.0	39,945	35,482	12.6
	1	장남소수력	0.8	(41,446)		[5.1]
	2	울릉도내연	1.5			
	3	태안화력#3	500.0			
	6	폐지-북제주(G/T)	-110.0			
	6	하동화력#1	500.0			
	6	삼천포화력#5	500.0			
	6	월성원자력#2	700.0			
	6	서인천3단계(S/T)	300.0			
	6	서인천4단계(S/T)	300.0			
	6	분당복합증설(S/T)	115.0			
	6	울산2복합(S/T)	300.0			
	6	보령복합(G/T)	900.0			
	6	한림복합(S/T)	35.0			
	6	거문도내연	0.5			
	6	덕적도내연	0.5			
	6	팔당수력보강	20.0			
	7	보령복합증설(G/T)	300.0			
	9	폐지-한화#2	-162.4			
	9	태안화력#4	500.0			
	11	한화복합(S/T#2)	150.0			
	12	삼천포화력#6	500.0			
	12	하동화력#2	500.0			
	12	남강수력(다목적)	14.0			
1998	6	울진원자력#3	1,000.0	45,546	38,388	18.6
	6	월성원자력#3	700.0	(46,574)		[11.0]
	6	하동화력#3	500.0			
	6	동해화력(국내탄)	200.0			
	6	보령복합(S/T)	450.0			
	6	보령복합증설(S/T)	150.0			
	6	한화복합(S/T#3)	150.0			
	6	울산1복합성능복구	50.0			
	7	부산복합(G/T)	900.0			
	10	당진화력#1	500.0			
	12	하동화력#4	500.0			
	12	밀양수력(다목적)	1.3			
	12	용담수력(다목적)	26.3			

연도	월	발 전 소 명		시설용량 (MW)	최대수요 (MW)	설 비 예비율 (%)
1999	1	폐지-군산화력외	-340	49,179	41,032	19.9
	6	울진원자력#4	1000	(50,880)		[12.6]
	6	월성원자력#4	700			
	6	당진화력#2	500			
	6	북제주화력#2	75			
	6	팔당수력보강	20			
	6	국내탄화력	200			
	7	부산복합(S/T)	450			
	9	하동화력#5	500			
	9	산청양수#1	350			
	12	산청양수#2	350			
	12	당진화력#3	500			
	12	횡성수력(다목적)	1.4			
2000	3	하동화력#6	500	51,955	43,559	19.3
	6	당진화력#4	500	(52,755)		[13.8]
	6	북제주화력#3	75			
	12	영흥도화력#1	800			
2001	1	폐지-영월#1,2	-100	55,005	46,115	19.3
	3	LNG복합(民資)	400	(55,906)		[12.8]
	3	LNG복합#1	450			
	6	영광원자력#5	1000			
	6	양양양수#1,2	500			
	12	영흥도화력#2	800			
	12	영월수력(다목적)	100			
	12	적성수력(다목적)	0.1			
2002	1	폐지-북제주내연	-40	57,766	48,668	18.7
	3	석유화력#1	500	(58,266)		[12.9]
	6	영광원자력#6	1000			
	6	LNG복합(民資)	400			
	9	석유화력#2	500			
2003	1	폐지-군산복합외	-600	60,916	51,099	19.2
	3	석탄화력#1	500	(62,721)		[13.3]
	3	석탄격상#1	800			
	3	LNG복합#2(大邱民資)	450			
	6	울진원자력#5	1000			
	6	석탄화력(民資)	500			
	9	대체전원(풍력 등)	5			
	9	석탄화력#2	500			
	10	양양양수#3,4	500			
	12	석탄격상#2	800			

연도	월	발 전 소 명		시설용량 (MW)	최대수요 (MW)	설 비 예비율 (%)
2004	1	폐지-서울#4,5	-387.5	63,833	53,430	19.5
	6	울진원자력#6	1000	(64,283)		[13.3]
	6	석탄화력(民資)	500			
	12	LNG복합#3(大邱民資)	450			
2005	1	폐지-인천 #3,4	-650	66,183	55,666	18.9
	3	LNG복합#4	450	(67,933)		[12.8]
	3	석탄격상#3	800			
	3	CCT(FBC,IGCC)	300			
	6	원자력#1	1000			
	10	양수#1,2	500			
	12	LNG복합#5(民資)	450			
	12	석탄격상#4	800			
2006	1	폐지-울산#2,3외	-870	68,963	57,717	19.5
	3	LNG복합#6	450	(68,963)		[13.0]
	3	LNG복합#7(民資)	450			
	6	원자력#2	1000			
2007	1	폐지-영남#1,2	-400	71,213	59,797	19.1
	3	LNG복합#8	450	(71,213)		[12.3]
	3	LNG복합#9,10(民資)	900			
	6	차세대원자력#1	1300			
2008	1	폐지-영동#1외	-175	73,638	61,823	19.1
	3	차세대원자력#3	1300	(74,138)		[12.2]
	6	차세대원자력#2	1300			
	10	양수#3,4(民資)	500			
2009	1	폐지-고리#1	-587	76,301	63,776	19.6
	3	LNG복합#11	450	(77,651)		[13.0]
	3	차세대원자력#4	1300			
	3	원자력#3	1000			
	9	LNG복합#12	450			
	12	LNG복합#13	450			
	12	LNG복합#14(民資)	450			
2010	1	폐지-영동#2외	-1350	78,201	65,642	19.1
	3	LNG복합#15,16	900	(79,551)		[12.1]
	3	원자력#4	1000			
	9	LNG복합#17(民資)	450			
	12	LNG복합#18	450			
	12	LNG복합#19(民資)	450			

2. 源別 發電所 廢止計劃

(단위 : MW)

연도	원자력	석 탄	LNG	중 유	경 유	합계
95					한림D/S (17) 울산복합 (110)	127
96				제주#1,2 (10) 한화#1 (162.4)		172.4
97		부산#1,2 (120)		한화#2 (162.4)	북제주G/T#1,2 (110)	392.4
98						-
99		군산 (75)		부산#3,4 (210)	북제주G/T#3 (55)	340
2000						-
2001		영월#1,2 (100)				100
2002				북제주D/S #1～8 (40)		40
2003					영월복합 (300) 군산복합 (300)	600
2004			서울#4,5 (387.5)			387.5
2005			인천#3,4 (650)			650
2006			인천#1 (250)	남제주#1,2 (20) 울산#1,2,3 (600)		870
2007				영남#1,2 (400)		400
2008		영동#1 (125)		북제주 (10) 남제주D/S #1～4 (40)		175
2009	고리#1 (587)					587
2010		영동#2 (200)	인천#2 (250)	여수#1,2 (500) 울산#4 (400)		1,350
원별 합계	587	620	1,537.5	2,554.8	892	6,191.3

3. 電源構成 展望

(단위 : MW, %)

연도	원자력	유연탄	L N G	중 유	경 유	무연탄	수 력	계
1994	7,616 (26.5)	5,800 (20.2)	4,961 (17.3)	5,905 (20.5)	955 (3.3)	1,020 (3.5)	2,493 (8.7)	28,750 (100)
1995	8,616 (26.8)	6,800 (21.1)	6,736 (20.9)	5,055 (15.7)	864 (2.7)	1,020 (3.2)	3,093 (9.6)	32,184 (100)
1996	9,616 (26.9)	6,800 (19.0)	8,636 (24.2)	5,632 (15.8)	903 (2.5)	1,020 (2.9)	3,094 (8.7)	35,702 (100)
1997	10,316 (24.9)	9,800 (23.6)	10,851 (26.2)	5,620 (13.6)	830 (2.0)	900 (2.2)	3,129 (7.5)	41,446 (100)
1998	12,016 (25.8)	11,300 (24.3)	13,751 (29.5)	4,420 (9.5)	830 (1.8)	1,100 (2.3)	3,157 (6.8)	46,574 (100)
1999	13,716 (27.0)	12,800 (25.2)	14,201 (27.9)	4,285 (8.4)	775 (1.5)	1,225 (2.4)	3,878 (7.6)	50,880 (100)
2000	13,716 (26.0)	14,600 (27.7)	14,201 (26.9)	4,360 (8.3)	775 (1.5)	1,225 (2.3)	3,878 (7.3)	52,755 (100)
2001	14,716 (26.3)	15,400 (27.6)	15,051 (26.9)	4,360 (7.8)	775 (1.4)	1,125 (2.0)	4,478 (8.0)	55,906 (100)
2002	15,716 (27.0)	15,400 (26.5)	15,451 (26.5)	5,320 (9.1)	775 (1.3)	1,125 (1.9)	4,478 (7.7)	58,266 (100)
2003	16,716 (26.7)	18,500 (29.5)	15,901 (25.3)	5,320 (8.5)	175 (0.3)	1,125 (1.8)	4,983 (7.9)	62,721 (100)
2004	17,716 (27.6)	19,000 (29.6)	15,964 (24.8)	5,320 (8.3)	175 (0.3)	1,125 (1.7)	4,983 (7.7)	64,283 (100)
2005	18,716 (27.5)	20,900 (30.8)	16,214 (23.9)	5,320 (7.8)	175 (0.3)	1,125 (1.6)	5,483 (8.1)	67,933 (100)
2006	19,716 (28.6)	20,900 (30.3)	16,864 (24.5)	4,700 (6.8)	175 (0.3)	1,125 (1.6)	5,483 (7.9)	68,963 (100)
2007	21,016 (29.5)	20,900 (29.3)	18,214 (25.6)	4,300 (6.0)	175 (0.3)	1,125 (1.6)	5,483 (7.7)	71,213 (100)
2008	23,616 (31.9)	20,900 (28.2)	18,214 (24.6)	4,250 (5.7)	175 (0.2)	1,000 (1.3)	5,983 (8.1)	74,138 (100)
2009	25,329 (32.6)	20,900 (26.9)	20,014 (25.8)	4,250 (5.5)	175 (0.2)	1,000 (1.3)	5,983 (7.7)	77,651 (100)
2010	26,329 (33.1)	20,900 (26.3)	22,014 (27.7)	3,350 (4.2)	175 (0.2)	800 (1.0)	5,983 (7.5)	79,551 (100)

4. 源別 發電量 展望

(단위 : GWh)

연도	원자력	석탄	국내탄	LNG	중유	경유	수력	양수	계
1995	62,790 (34.5)	44,760 (24.5)	4,380 (2.4)	27,830 (15.3)	33,320 (18.3)	4,690 (2.6)	3,840 (2.1)	520 (0.3)	182,130 (100)
1996	70,440 (35.2)	50,150 (25.1)	4,460 (2.2)	32,930 (16.5)	35,690 (17.8)	2,240 (1.1)	3,840 (1.9)	370 (0.2)	200,120 (100)
1997	74,620 (34.2)	57,320 (26.3)	4,160 (1.9)	38,610 (17.7)	37,370 (17.1)	1,880 (0.9)	3,890 (1.8)	460 (0.2)	218,310 (100)
1998	81,880 (34.7)	74,070 (31.4)	4,610 (2.0)	39,240 (16.6)	26,390 (11.2)	4,850 (2.1)	3,930 (1.7)	1,050 (0.4)	236,020 (100)
1999	94,920 (37.6)	80,240 (31.8)	4,860 (1.9)	45,910 (18.2)	19,400 (7.7)	1,290 (0.5)	4,050 (1.6)	1,760 (0.7)	252,430 (100)
2000	100,510 (37.5)	89,930 (33.6)	5,170 (1.9)	47,720 (17.8)	18,100 (6.8)	1,060 (0.4)	4,050 (1.5)	1,340 (0.5)	267,880 (100)
2001	103,510 (36.4)	99,290 (34.9)	5,160 (1.8)	48,500 (17.1)	19,730 (6.9)	1,450 (0.5)	4,050 (1.4)	2,820 (1.0)	284,510 (100)
2002	111,350 (37.4)	108,430 (36.4)	5,170 (1.7)	45,260 (15.2)	22,740 (7.6)	310 (0.1)	4,310 (1.4)	730 (0.2)	298,300 (100)
2003	118,520 (37.8)	117,140 (37.4)	5,170 (1.6)	43,410 (13.9)	23,510 (7.5)	330 (0.1)	4,310 (1.4)	840 (0.3)	313,230 (100)
2004	125,780 (38.4)	129,970 (39.6)	5,170 (1.6)	39,300 (12.0)	22,010 (6.7)	350 (0.1)	4,310 (1.3)	920 (0.3)	327,810 (100)
2005	132,960 (38.9)	135,420 (39.6)	5,170 (1.5)	40,890 (12.0)	21,820 (6.4)	340 (0.1)	4,310 (1.3)	820 (0.2)	341,730 (100)
2006	140,070 (39.4)	141,710 (39.9)	5,170 (1.5)	43,340 (12.2)	19,490 (5.5)	340 (0.1)	4,310 (1.2)	840 (0.2)	355,270 (100)
2007	148,010 (40.2)	141,530 (38.4)	5,170 (1.4)	49,190 (13.4)	18,880 (5.1)	350 (0.1)	4,310 (1.2)	790 (0.2)	368,230 (100)
2008	164,700 (43.1)	140,320 (36.7)	5,170 (1.4)	48,450 (12.7)	17,550 (4.6)	350 (0.1)	4,310 (1.1)	1,170 (0.3)	382,020 (100)
2009	179,200 (45.3)	139,370 (35.2)	5,170 (1.3)	48,440 (12.2)	17,210 (4.4)	360 (0.1)	4,310 (1.1)	1,450 (0.4)	395,510 (100)
2010	186,000 (45.5)	140,780 (34.4)	5,150 (1.3)	57,080 (14.0)	13,390 (3.3)	360 (0.1)	4,310 (1.1)	1,120 (0.3)	408,190 (100)

5. 燃料所要量 및 炭素排出量 展望

구 분	석탄 (천ton)	국내탄 (천ton)	LNG (천ton)	중유 (천kL)	경유 (천kL)	탄소배출 총량 (천ton)	단위배출량 (kg-C/kWh)
1995	15,880	2,450	4,460	7,970	1,180	23,295	0.1283
1996	17,690	2,510	4,800	8,590	620	24,933	0.1250
1997	20,100	2,320	5,970	8,800	500	27,544	0.1267
1998	25,720	2,510	5,810	6,240	1,040	29,495	0.1258
1999	27,720	2,510	6,860	4,610	320	29,754	0.1189
2000	30,930	2,630	7,260	4,320	260	32,012	0.1204
2001	34,110	2,630	7,280	4,630	370	34,535	0.1228
2002	37,260	2,630	6,500	5,720	70	36,344	0.1226
2003	40,160	2,630	6,500	5,410	80	38,436	0.1235
2004	44,430	2,630	6,500	5,090	80	41,050	0.1261
2005	46,240	2,630	6,500	5,050	80	42,240	0.1244
2006	48,330	2,630	6,500	4,500	80	43,179	0.1223
2007	48,290	2,630	7,000	4,350	80	43,437	0.1186
2008	47,870	2,630	7,000	4,020	80	42,866	0.1130
2009	47,540	2,630	7,000	3,940	90	42,581	0.1085
2010	48,040	2,630	7,200	3,010	90	42,280	0.1043