

2003

2002

An Analysis of HANARO Operating Performance of the Year 2002

150

				2002
		2001		. 2002
4852 MWD	2001	1082 MWD	가	가
	. 2001			
3.56	2.49	, 2002	0.29	-0.38
. 3				
	1		가	

Abstract

By using the amount of power generation, the delay hours in full-power arrival and those in shutdown as parameters, the operation record of HANARO in the year 2002 was analysed and the results were compared with those for the year 2001. The amount of power generation in 2002 was 4852 MWD, which is larger than that of 2001 by 1082 MWD and is the highest in record after initial criticality. The delay hours in full-power arrival and the delay hours in shutdown was 3.56 and 2.49 hours for 2001, respectively. Those for 2002 were 0.29 and -0.38 hours. This quantitative and qualitative improvement is believed to be in debt to the following measures; 3 week plan for activities including maintenance and experiment, the reduction of fuel inspection amount and starting-up the reactor by one hour early.

1.

1995	2	(criticality)
		24 MW , 17 1
2~3		, 3~4

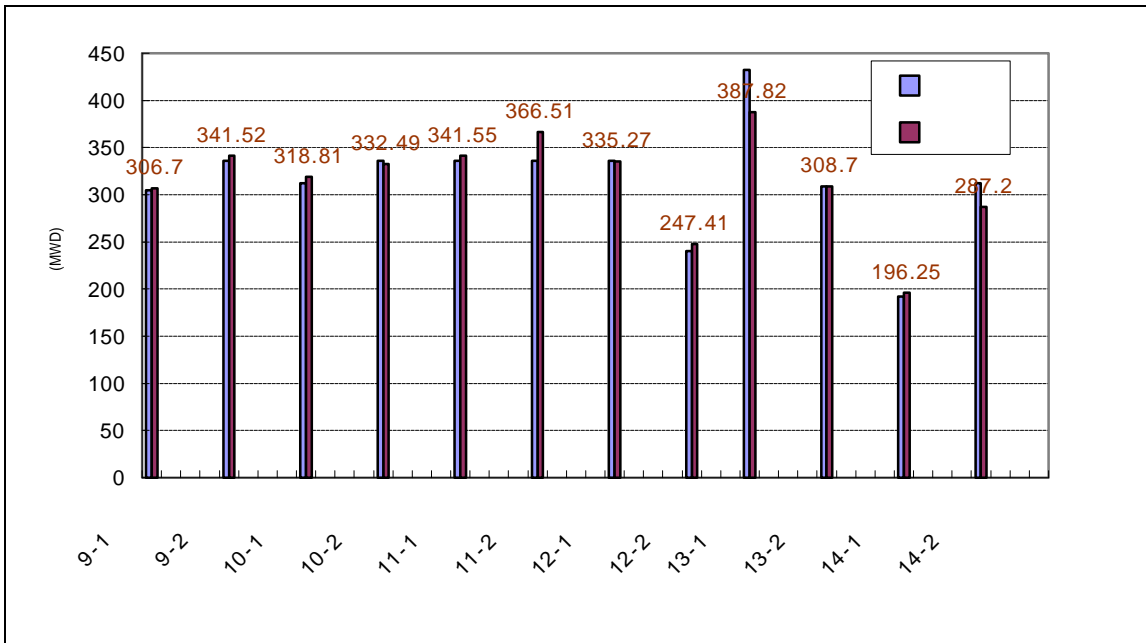
18 3 2
 1
 (1, 2)
 가
 2001 2002

2. 2001

(bias)
 (dispersion)

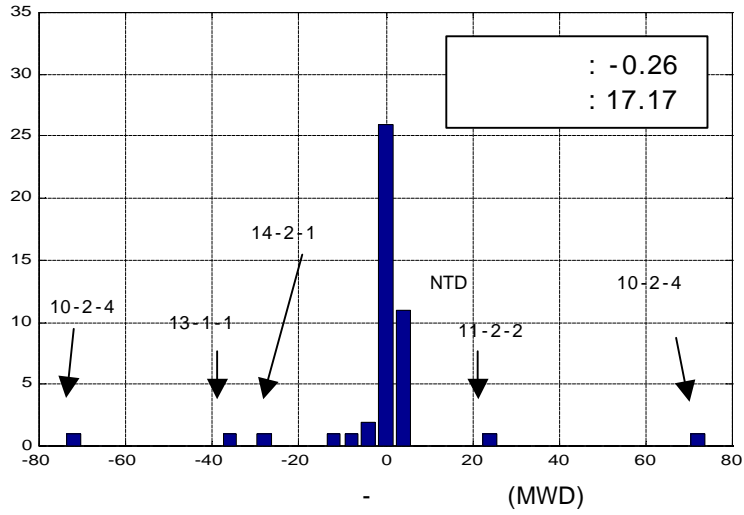
2.1

1 2001 2001
 3782 MWD 3770 MWD 99.7%
 (3)



1 2001

26



2 2001

(x : 4MWD)

-0.26 MWD 17.17 MWD

가

가

, NTD

5

0.64 MWD 2.69 MWD

2.2

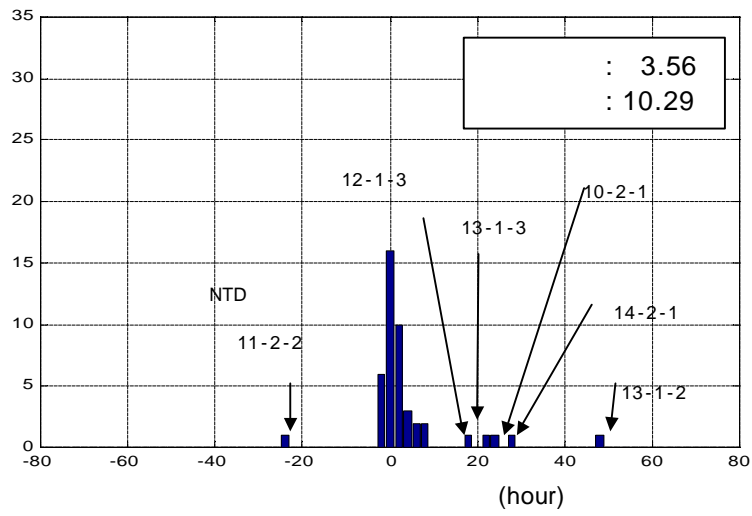
3 2001

45

1

23

22



3 2001 (x : 2)

2001 3.56 10.29

. 3

가

NTD

가

가 (23)

-0.39 1.07

23

64

가

가

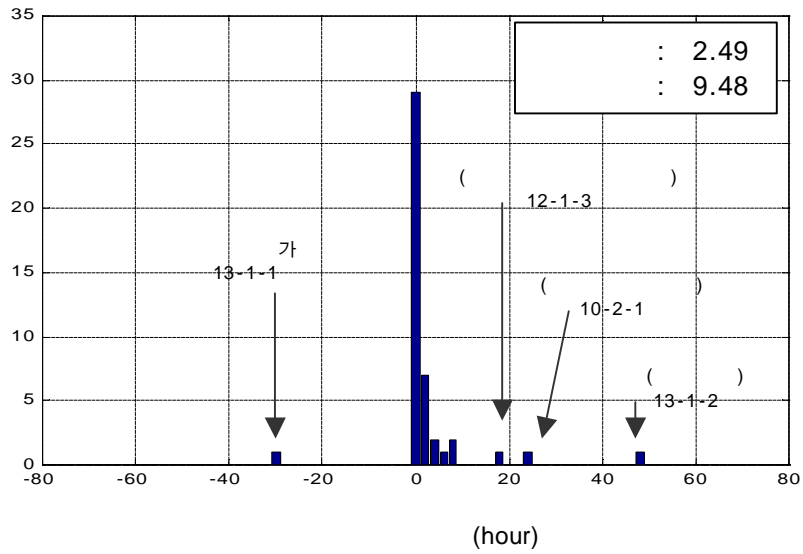
2.3

4 2001

45

1

29



4 2001 (x : 2)

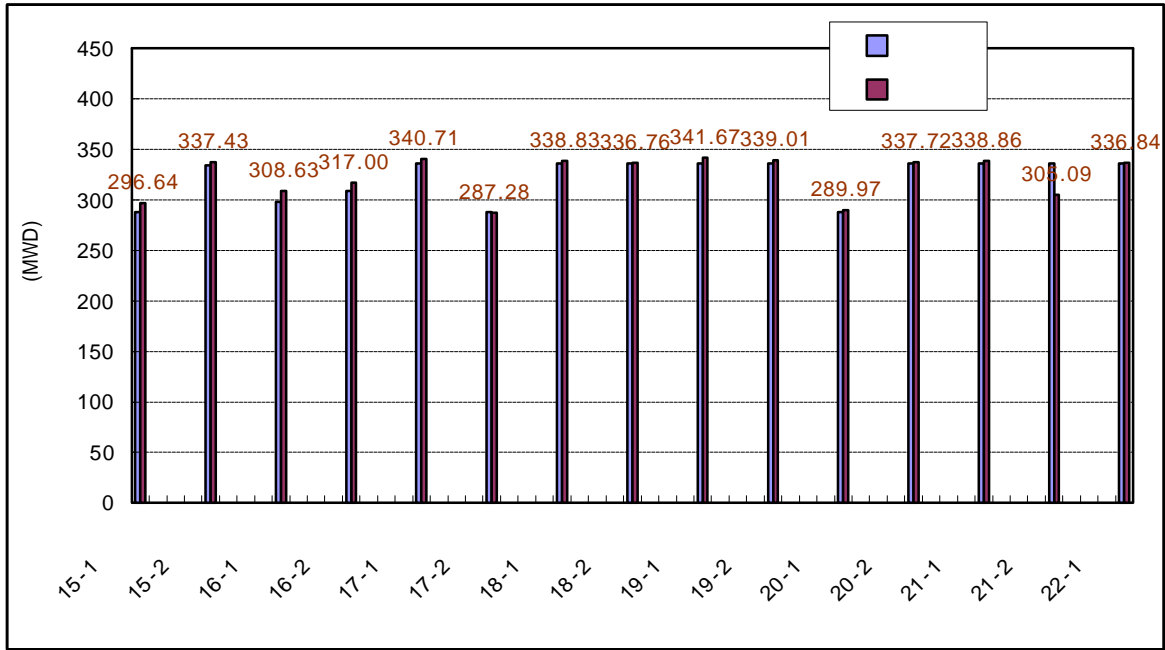
가 15
 , 11 , 4
 ,
 1 , 1 ,
 가
 2001 2.49 9.48
 ,
 , 가 (22)
 0.13 0.38 가 ,
 가 45 ,

3. 2002

2001 가
 , , 가
 (bias)
 (dispersion)

3.1

5 2002 . 2002
 4829 MWD , 4852 MWD
 100.5% (4).



5 2002

6 2002

2002

가

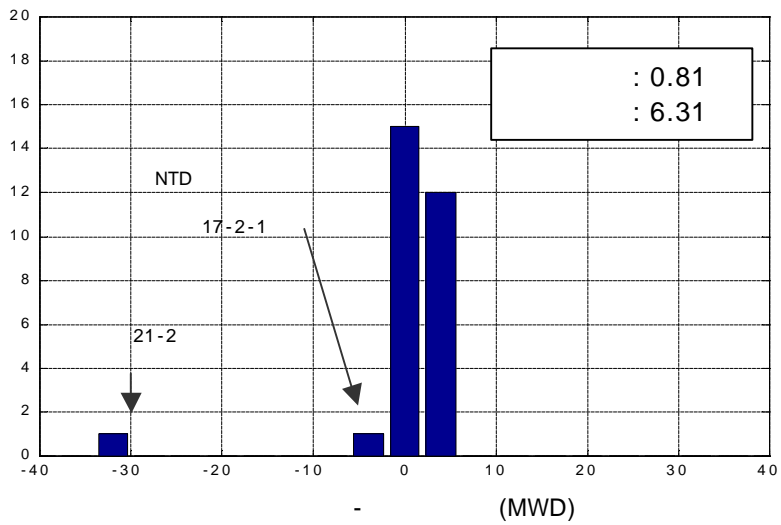
0.81 MWD 6.31 MWD

28

1.87 MWD 1.64 MWD

가 (13)

2.56 MWD 1.38 MWD



6 2002

(x : 4MWD)

3.2

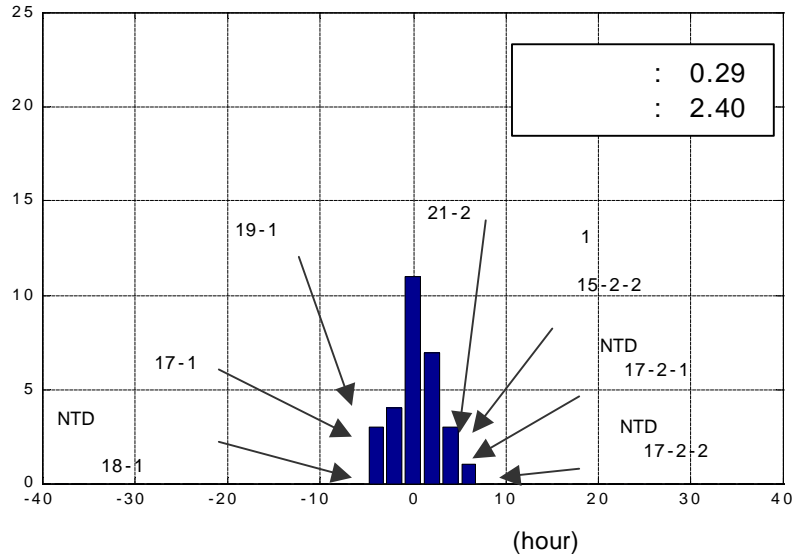
7 2002

29

1

18

11



7 2002

(x : 2)

2002

2.40

NTD

, 1

7

,

3

NTD

가

(15)

1.28

0.29

, 10 kW

3

가

-1.01

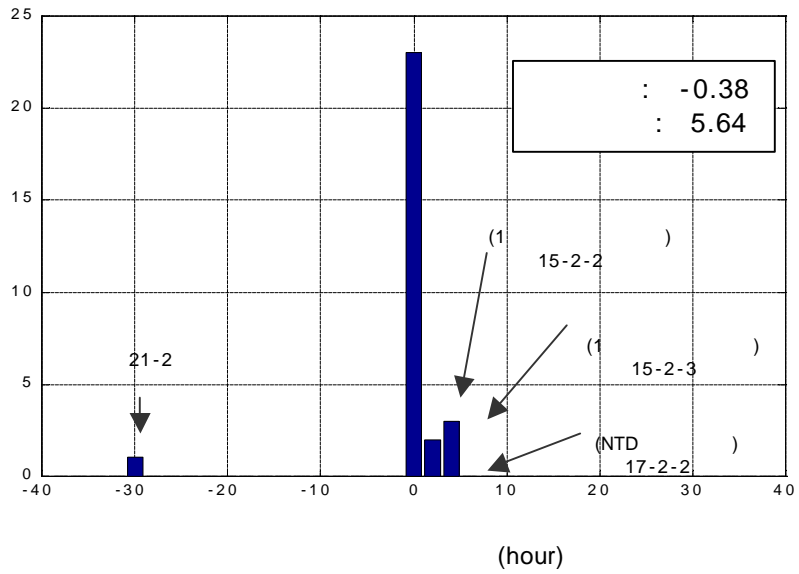
3.3

8 2002

, 29

1

23



8 2002 (x : 2)

1 가 5

1 가 ,

23

1

2002
5.64

-0.38

가 (18)

0.02

0.04

가

가 29

4. 2001 2002

2001

3,770 MWD

99.7%

, 2002

4852 MWD

100.5%

2001 2002

-0.26 MWD

0.81 MWD

가

17.17 MWD

6.31 MWD

가

3.56

0.29

가

-0.39

-1.01

, 2002

(3, 4)

10.29

2.40

3

가 2001

9.48

5.64

2.49

-0.38

가

0.02

0.04

2001

2002

, 2002

2001

1 2001 2002

		2001 ⁽³⁾	2002 ⁽⁴⁾	2001 ⁽³⁾	2002 ⁽⁴⁾
(MWD)		45	29	15	13
		-0.26	0.81	1.72	2.56
		17.17	6.31	1.07	1.38
(hour)		45	29	23	15
		3.56	0.29	-0.39	-1.01
		10.29	2.40	1.07	1.28
(hour)		45	29	22	18
		2.49	-0.38	0.13	0.02
		9.48	5.64	0.38	0.04

5.

1) 2002

2001

2002

가

•

3

•

1

•

2)

1. , “ 2001 , ” KAERI/MR-379/2001, , 2002. 1.
2. , “ 2002 , ” KAERI/MR-395/2002, , 2003. 1.
3. , , “ 2001 , ” ,
HAN-RO-CR-1000-01-047, 2001. 12. 27.
4. , , “ 2002 , ” ,
HAN-RO-CR-1000-03-001, 2003. 1. 8.
5. “ 2002 1/4 (2), ” , ,
2001. 2. 22.
6. “ 2002 2/4 , ” , ,
2002. 3. 15.
7. “ 2002 4 27 , ” , ,
2002. 4. 22.