



RESULTS

NEOS Server Version 6.0
Job# : 12508800
Password : lSkfuVGq
User :
Solver : minco:BARON:GAMS
Start : 2022-12-08 01:22:11
End : 2022-12-08 01:22:13
Host : prod-sub-1.neos-server.org

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This information is provided without any express or implied warranty. In particular, there is no warranty of any kind concerning the fitness of this information for any particular purpose.

Announcements:

Executed on prod-exec-7.neos-server.org
GAMS 40.1.0 93c2a77b Aug 1, 2022 LEX-LEG x86 64bit/Linux - 12/08/22 01:22:12 Page 1
Pump scheduling smallest
C o m p i l a t i o n

**** LIST OF STRAY NAMES - CHECK DECLARATIONS FOR SPURIOUS COMMAS
**** STRAY NAME sinon OF TYPE VAR

COMPILATION TIME = 0.001 SECONDS 3 MB 40.1.0 93c2a77b LEX-LEG
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Pump scheduling smallest
Range Statistics SOLVE Planification Using MINLP From line 138

RANGE STATISTICS (ABSOLUTE NON-ZERO FINITE VALUES)

RHS [min, max] : [1.000E+00, 3.000E+02] - Zero values observed as well
Bound [min, max] : [1.000E+00, 1.000E+00] - Zero values observed as well
Matrix [min, max] : [2.916E-02, 9.921E+01]

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Pump scheduling smallest
Model Statistics SOLVE Planification Using MINLP From line 138

MODEL STATISTICS

BLOCKS OF EQUATIONS	13	SINGLE EQUATIONS	307
BLOCKS OF VARIABLES	7	SINGLE VARIABLES	208
NON ZERO ELEMENTS	587	NON LINEAR N-Z	0
CODE LENGTH	0	CONSTANT POOL	16
DISCRETE VARIABLES	27		

GENERATION TIME = 0.002 SECONDS 4 MB 40.1.0 93c2a77b LEX-LEG
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Pump scheduling smallest
Solution Report SOLVE Planification Using MINLP From line 138

S O L V E S U M M A R Y

MODEL	Planification	OBJECTIVE	z
TYPE	MINLP	DIRECTION	MINIMIZE
SOLVER	BARON	FROM LINE	138

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**** SOLVER STATUS      1 Normal Completion
**** MODEL STATUS      8 Integer Solution
**** OBJECTIVE VALUE    1.1320

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RESOURCE USAGE, LIMIT    0.040 10000000000.000
ITERATION COUNT, LIMIT   0    2147483647
EVALUATION ERRORS        0          0

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GAMS/BARON 40.1.0 93c2a77b Aug 1, 2022 LEG x86 64bit/Linux

BARON is a product of The Optimization Firm, LLC. <http://www.minlp.com/>
Parts of the BARON software were created at the
University of Illinois at Urbana-Champaign.

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BARON version 22.7.23. Built: LNX-64 Sat Jul 23 23:33:44 EDT 2022

BARON is a product of The Optimization Firm.
For information on BARON, see <https://minlp.com/about-baron>

If you use this software, please cite publications from
<https://minlp.com/baron-publications>, such as:

Kilinc, M. and N. V. Sahinidis, Exploiting integrality in the global
optimization of mixed-integer nonlinear programming problems in BARON,
Optimization Methods and Software, 33, 540-562, 2018.

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This BARON run may utilize the following subsolver(s)
For LP/MIP/QP: CLP/CBC, ILOG CPLEX
For NLP: MINOS, SNOPT, External NLP, IPOPT, FILTERSQP

```

Solution      = 1.132016927868 best solution found during preprocessing
Best possible = 1.13190373749
Absolute gap   = 0.000113190377999839 optca = 1E-9
Relative gap   = 9.99900047546264E-5 optcr = 0.0001

```

	LOWER	LEVEL	UPPER	MARGINAL
---- EQU cost	.	.	.	1.000

cost definition de la fonction objective

---- EQU flow_s conservation du flow entre les pompes et la source à chaque t
emps t

	LOWER	LEVEL	UPPER	MARGINAL
t1
t2	.	.	.	0.003
t3	.	.	.	0.003
t4	.	.	.	0.003
t5	.	.	.	0.003
t6	.	.	.	0.003
t7	.	.	.	0.003
t8	.	.	.	0.003
t9	.	.	.	0.003

---- EQU flow_r conservation du flow à chaque temps t

	LOWER	LEVEL	UPPER	MARGINAL
t1.r1
t1.r2

t1.r3
t1.r4
t2.r1	.	.	.	0.003
t2.r2	.	.	.	0.003
t2.r3	.	.	.	0.003
t2.r4	.	.	.	0.003
t3.r1	.	.	.	0.003
t3.r2	.	.	.	0.003
t3.r3	.	.	.	0.003
t3.r4	.	.	.	0.003
t4.r1	.	.	.	0.003
t4.r2	.	.	.	0.003
t4.r3	.	.	.	0.003
t4.r4	.	.	.	0.003
t5.r1	.	.	.	0.003
t5.r2	.	.	.	0.003
t5.r3	.	.	.	0.003
t5.r4	.	.	.	0.003
t6.r1	.	.	.	0.003
t6.r2	.	.	.	0.003
t6.r3	.	.	.	0.003
t6.r4	.	.	.	0.003
t7.r1	.	.	.	0.003
t7.r2	.	.	.	0.003
t7.r3	.	.	.	0.003
t7.r4	.	.	.	0.003
t8.r1	.	.	.	0.003
t8.r2	.	.	.	0.003
t8.r3	.	.	.	0.003
t8.r4	.	.	.	0.003
t9.r1	.	.	.	0.003
t9.r2	.	.	.	0.003
t9.r3	.	.	.	0.003
t9.r4	.	.	.	0.003

---- EQU flow_j conservation du flow à chaque temps t

	LOWER	LEVEL	UPPER	MARGINAL
t1.j1
t1.j2
t2.j1	.	.	.	0.003
t2.j2	.	.	.	0.003
t3.j1	.	.	.	0.003
t3.j2	.	.	.	0.003
t4.j1	.	.	.	0.003
t4.j2	.	.	.	0.003
t5.j1	.	.	.	0.003
t5.j2	.	.	.	0.003
t6.j1	.	.	.	0.003
t6.j2	.	.	.	0.003
t7.j1	.	.	.	0.003
t7.j2	.	.	.	0.003
t8.j1	.	.	.	0.003
t8.j2	.	.	.	0.003
t9.j1	.	.	.	0.003
t9.j2	.	.	.	0.003

---- EQU volumes_min volumes min à chaque temps t et pour chaque réservoir r

	LOWER	LEVEL	UPPER	MARGINAL
r1.t1	-INF	-100.000	-100.000	.
r1.t2	-INF	-105.000	-100.000	.
r1.t3	-INF	-100.000	-100.000	.
r1.t4	-INF	-125.670	-100.000	.
r1.t5	-INF	-119.170	-100.000	.
r1.t6	-INF	-113.500	-100.000	.
r1.t7	-INF	-106.000	-100.000	.
r1.t8	-INF	-103.000	-100.000	.

r1.t9	-INF	-100.000	-100.000	-0.003
r2.t1	-INF	-100.000	-100.000	.
r2.t2	-INF	-118.000	-100.000	.
r2.t3	-INF	-100.000	-100.000	.
r2.t4	-INF	-145.000	-100.000	.
r2.t5	-INF	-145.000	-100.000	.
r2.t6	-INF	-145.000	-100.000	.
r2.t7	-INF	-145.000	-100.000	.
r2.t8	-INF	-145.000	-100.000	.
r2.t9	-INF	-100.000	-100.000	-0.003
r3.t1	-INF	-100.000	-100.000	.
r3.t2	-INF	-100.000	-100.000	.
r3.t3	-INF	-177.830	-100.000	.
r3.t4	-INF	-152.330	-100.000	.
r3.t5	-INF	-141.330	-100.000	.
r3.t6	-INF	-131.330	-100.000	.
r3.t7	-INF	-121.330	-100.000	.
r3.t8	-INF	-110.330	-100.000	.
r3.t9	-INF	-100.000	-100.000	-0.003
r4.t1	-INF	-100.000	-100.000	.
r4.t2	-INF	-106.522	-100.000	.
r4.t3	-INF	-113.544	-100.000	.
r4.t4	-INF	-116.830	-100.000	.
r4.t5	-INF	-107.330	-100.000	.
r4.t6	-INF	-103.330	-100.000	.
r4.t7	-INF	-101.000	-100.000	.
r4.t8	-INF	-101.000	-100.000	.
r4.t9	-INF	-100.000	-100.000	-0.003

---- EQU volumes_max volumes max à chaque temps t et pour chaque réservoir r

	LOWER	LEVEL	UPPER	MARGINAL
r1.t1	-INF	100.000	300.000	.
r1.t2	-INF	105.000	300.000	.
r1.t3	-INF	100.000	300.000	.
r1.t4	-INF	125.670	300.000	.
r1.t5	-INF	119.170	300.000	.
r1.t6	-INF	113.500	300.000	.
r1.t7	-INF	106.000	300.000	.
r1.t8	-INF	103.000	300.000	.
r1.t9	-INF	100.000	300.000	.
r2.t1	-INF	100.000	300.000	.
r2.t2	-INF	118.000	300.000	.
r2.t3	-INF	100.000	300.000	.
r2.t4	-INF	145.000	300.000	.
r2.t5	-INF	145.000	300.000	.
r2.t6	-INF	145.000	300.000	.
r2.t7	-INF	145.000	300.000	.
r2.t8	-INF	145.000	300.000	.
r2.t9	-INF	100.000	300.000	.
r3.t1	-INF	100.000	300.000	.
r3.t2	-INF	100.000	300.000	.
r3.t3	-INF	177.830	300.000	.
r3.t4	-INF	152.330	300.000	.
r3.t5	-INF	141.330	300.000	.
r3.t6	-INF	131.330	300.000	.
r3.t7	-INF	121.330	300.000	.
r3.t8	-INF	110.330	300.000	.
r3.t9	-INF	100.000	300.000	.
r4.t1	-INF	100.000	300.000	.
r4.t2	-INF	106.522	300.000	.
r4.t3	-INF	113.544	300.000	.
r4.t4	-INF	116.830	300.000	.
r4.t5	-INF	107.330	300.000	.
r4.t6	-INF	103.330	300.000	.
r4.t7	-INF	101.000	300.000	.
r4.t8	-INF	101.000	300.000	.
r4.t9	-INF	100.000	300.000	.

---- EQU volume_init volumes init pour chaque réservoir r

	LOWER	LEVEL	UPPER	MARGINAL
r1	100.000	100.000	100.000	-0.003
r2	100.000	100.000	100.000	-0.003
r3	100.000	100.000	100.000	-0.003
r4	100.000	100.000	100.000	-0.003

---- EQU debits_min débits min pour chaque temps t et pour chaque pompe k (ss
i la pompe k est allumée)

	LOWER	LEVEL	UPPER	MARGINAL
small.p1.t1	-INF	.	.	.
small.p1.t2	-INF	.	.	.
small.p1.t3	-INF	-99.182	.	.
small.p1.t4	-INF	-86.126	.	.
small.p1.t5	-INF	.	.	.
small.p1.t6	-INF	.	.	.
small.p1.t7	-INF	.	.	.
small.p1.t8	-INF	.	.	.
small.p1.t9	-INF	.	.	-0.002
small.p2.t1	-INF	.	.	-0.003
small.p2.t2	-INF	.	.	.
small.p2.t3	-INF	.	.	.
small.p2.t4	-INF	.	.	.
small.p2.t5	-INF	.	.	-0.002
small.p2.t6	-INF	.	.	-0.002
small.p2.t7	-INF	.	.	.
small.p2.t8	-INF	.	.	-0.002
small.p2.t9	-INF	.	.	.
small.p3.t1	-INF	.	.	.
small.p3.t2	-INF	-99.182	.	.
small.p3.t3	-INF	.	.	.
small.p3.t4	-INF	.	.	.
small.p3.t5	-INF	.	.	.
small.p3.t6	-INF	.	.	-0.002
small.p3.t7	-INF	.	.	.
small.p3.t8	-INF	.	.	-0.002
small.p3.t9	-INF	.	.	.

---- EQU debits_max débits max pour chaque temps t et pour chaque pompe k (ss
i la pompe k est allumée)

	LOWER	LEVEL	UPPER	MARGINAL
small.p1.t1	-INF	.	.	.
small.p1.t2	-INF	.	.	.
small.p1.t3	-INF	-0.028	.	.
small.p1.t4	-INF	-13.084	.	.
small.p1.t5	-INF	.	.	.
small.p1.t6	-INF	.	.	.
small.p1.t7	-INF	.	.	.
small.p1.t8	-INF	.	.	.
small.p1.t9	-INF	.	.	.
small.p2.t1	-INF	.	.	.
small.p2.t2	-INF	.	.	.
small.p2.t3	-INF	.	.	.
small.p2.t4	-INF	.	.	.
small.p2.t5	-INF	.	.	.
small.p2.t6	-INF	.	.	.
small.p2.t7	-INF	.	.	.
small.p2.t8	-INF	.	.	.
small.p2.t9	-INF	.	.	.
small.p3.t1	-INF	.	.	.
small.p3.t2	-INF	-0.028	.	.
small.p3.t3	-INF	.	.	.
small.p3.t4	-INF	.	.	.
small.p3.t5	-INF	.	.	.

small.p3.t6	-INF	.	.	.
small.p3.t7	-INF	.	.	.
small.p3.t8	-INF	.	.	.
small.p3.t9	-INF	.	.	.

---- EQU debits_pipeJ_max débit max pour chaque pipe à chaque temps t

	LOWER	LEVEL	UPPER	MARGINAL
j1.j2.t1	-INF	.	99.076	.
j1.j2.t2	-INF	76.830	99.076	.
j1.j2.t3	-INF	91.160	99.076	.
j1.j2.t4	-INF	45.000	99.076	.
j1.j2.t5	-INF	.	99.076	.
j1.j2.t6	-INF	.	99.076	.
j1.j2.t7	-INF	.	99.076	.
j1.j2.t8	-INF	.	99.076	.
j1.j2.t9	-INF	.	99.076	.
j1.r1.t1	-INF	.	98.753	.
j1.r1.t2	-INF	14.830	98.753	.
j1.r1.t3	-INF	.	98.753	.
j1.r1.t4	-INF	29.340	98.753	.
j1.r1.t5	-INF	.	98.753	.
j1.r1.t6	-INF	.	98.753	.
j1.r1.t7	-INF	.	98.753	.
j1.r1.t8	-INF	.	98.753	.
j1.r1.t9	-INF	.	98.753	.
j1.r4.t1	-INF	.	99.028	.
j1.r4.t2	-INF	7.522	99.028	.
j1.r4.t3	-INF	8.022	99.028	.
j1.r4.t4	-INF	11.786	99.028	.
j1.r4.t5	-INF	.	99.028	.
j1.r4.t6	-INF	.	99.028	.
j1.r4.t7	-INF	.	99.028	.
j1.r4.t8	-INF	.	99.028	.
j1.r4.t9	-INF	.	99.028	.
j2.r2.t1	-INF	.	97.546	.
j2.r2.t2	-INF	62.830	97.546	.
j2.r2.t3	-INF	.	97.546	.
j2.r2.t4	-INF	45.000	97.546	.
j2.r2.t5	-INF	.	97.546	.
j2.r2.t6	-INF	.	97.546	.
j2.r2.t7	-INF	.	97.546	.
j2.r2.t8	-INF	.	97.546	.
j2.r2.t9	-INF	.	97.546	.
j2.r3.t1	-INF	.	98.405	.
j2.r3.t2	-INF	14.000	98.405	.
j2.r3.t3	-INF	91.160	98.405	.
j2.r3.t4	-INF	.	98.405	.
j2.r3.t5	-INF	.	98.405	.
j2.r3.t6	-INF	.	98.405	.
j2.r3.t7	-INF	.	98.405	.
j2.r3.t8	-INF	.	98.405	.
j2.r3.t9	-INF	.	98.405	.

---- EQU debits_pipeS_max débit max pour chaque pipe à chaque temps t

	LOWER	LEVEL	UPPER	MARGINAL
s.j1.t1	-INF	.	99.182	.
s.j1.t2	-INF	99.182	99.182	.
s.j1.t3	-INF	99.182	99.182	.
s.j1.t4	-INF	86.126	99.182	.
s.j1.t5	-INF	.	99.182	.
s.j1.t6	-INF	.	99.182	.
s.j1.t7	-INF	.	99.182	.
s.j1.t8	-INF	.	99.182	.
s.j1.t9	-INF	.	99.182	.

---- EQU puissances puissances de chaque pompe à chaque temps t et pour chaque

e pompe k

	LOWER	LEVEL	UPPER	MARGINAL
small.p1.t1	.	.	.	0.029
small.p1.t2	.	.	.	0.029
small.p1.t3	.	.	.	0.029
small.p1.t4	.	.	.	0.029
small.p1.t5	.	.	.	0.046
small.p1.t6	.	.	.	0.046
small.p1.t7	.	.	.	0.046
small.p1.t8	.	.	.	0.046
small.p1.t9	.	.	.	0.046
small.p2.t1	.	.	.	0.029
small.p2.t2	.	.	.	0.029
small.p2.t3	.	.	.	0.029
small.p2.t4	.	.	.	0.029
small.p2.t5	.	.	.	0.046
small.p2.t6	.	.	.	0.046
small.p2.t7	.	.	.	0.046
small.p2.t8	.	.	.	0.046
small.p2.t9	.	.	.	0.046
small.p3.t1	.	.	.	0.029
small.p3.t2	.	.	.	0.029
small.p3.t3	.	.	.	0.029
small.p3.t4	.	.	.	0.029
small.p3.t5	.	.	.	0.046
small.p3.t6	.	.	.	0.046
small.p3.t7	.	.	.	0.046
small.p3.t8	.	.	.	0.046
small.p3.t9	.	.	.	0.046

---- EQU demandes demandes pour chaque temps t et pour chaque réservoir r (au ssi conservation du flow dans chaque tank)

	LOWER	LEVEL	UPPER	MARGINAL
r1.t2	9.830	9.830	9.830	0.003
r1.t3	5.000	5.000	5.000	0.003
r1.t4	3.670	3.670	3.670	0.003
r1.t5	6.500	6.500	6.500	0.003
r1.t6	5.670	5.670	5.670	0.003
r1.t7	7.500	7.500	7.500	0.003
r1.t8	3.000	3.000	3.000	0.003
r1.t9	3.000	3.000	3.000	0.003
r2.t2	44.830	44.830	44.830	0.003
r2.t3	18.000	18.000	18.000	0.003
r2.t4	.	.	.	0.003
r2.t5	.	.	.	0.003
r2.t6	.	.	.	0.003
r2.t7	.	.	.	0.003
r2.t8	.	.	.	0.003
r2.t9	45.000	45.000	45.000	0.003
r3.t2	14.000	14.000	14.000	0.003
r3.t3	13.330	13.330	13.330	0.003
r3.t4	25.500	25.500	25.500	0.003
r3.t5	11.000	11.000	11.000	0.003
r3.t6	10.000	10.000	10.000	0.003
r3.t7	10.000	10.000	10.000	0.003
r3.t8	11.000	11.000	11.000	0.003
r3.t9	10.330	10.330	10.330	0.003
r4.t2	1.000	1.000	1.000	0.003
r4.t3	1.000	1.000	1.000	0.003
r4.t4	8.500	8.500	8.500	0.003
r4.t5	9.500	9.500	9.500	0.003
r4.t6	4.000	4.000	4.000	0.003
r4.t7	2.330	2.330	2.330	0.003
r4.t8	.	.	.	0.003
r4.t9	1.000	1.000	1.000	0.003

---- VAR qkt Débit d'eau pompé par la pompe k à la période t

	LOWER	LEVEL	UPPER	MARGINAL
small.p1.t1	.	.	+INF	0.003
small.p1.t2	.	.	+INF	.
small.p1.t3	.	99.182	+INF	.
small.p1.t4	.	86.126	+INF	.
small.p1.t5	.	.	+INF	0.002
small.p1.t6	.	.	+INF	0.002
small.p1.t7	.	.	+INF	0.002
small.p1.t8	.	.	+INF	0.002
small.p1.t9	.	.	+INF	.
small.p2.t1	.	.	+INF	.
small.p2.t2	.	.	+INF	.
small.p2.t3	.	.	+INF	.
small.p2.t4	.	.	+INF	.
small.p2.t5	.	.	+INF	.
small.p2.t6	.	.	+INF	.
small.p2.t7	.	.	+INF	0.002
small.p2.t8	.	.	+INF	.
small.p2.t9	.	.	+INF	0.002
small.p3.t1	.	.	+INF	0.003
small.p3.t2	.	99.182	+INF	.
small.p3.t3	.	.	+INF	.
small.p3.t4	.	.	+INF	.
small.p3.t5	.	.	+INF	0.002
small.p3.t6	.	.	+INF	.
small.p3.t7	.	.	+INF	0.002
small.p3.t8	.	.	+INF	.
small.p3.t9	.	.	+INF	0.002

---- VAR qrt Débit entrant dans chaque réservoir r à la période t

	LOWER	LEVEL	UPPER	MARGINAL
r1.t1	.	.	+INF	.
r1.t2	.	14.830	+INF	.
r1.t3	.	.	+INF	.
r1.t4	.	29.340	+INF	.
r1.t5	.	.	+INF	.
r1.t6	.	.	+INF	.
r1.t7	.	.	+INF	.
r1.t8	.	.	+INF	.
r1.t9	.	.	+INF	.
r2.t1	.	.	+INF	.
r2.t2	.	62.830	+INF	.
r2.t3	.	.	+INF	.
r2.t4	.	45.000	+INF	.
r2.t5	.	.	+INF	.
r2.t6	.	.	+INF	.
r2.t7	.	.	+INF	.
r2.t8	.	.	+INF	.
r2.t9	.	.	+INF	.
r3.t1	.	.	+INF	.
r3.t2	.	14.000	+INF	.
r3.t3	.	91.160	+INF	.
r3.t4	.	.	+INF	.
r3.t5	.	.	+INF	.
r3.t6	.	.	+INF	.
r3.t7	.	.	+INF	.
r3.t8	.	.	+INF	.
r3.t9	.	.	+INF	.
r4.t1	.	.	+INF	.
r4.t2	.	7.522	+INF	.
r4.t3	.	8.022	+INF	.
r4.t4	.	11.786	+INF	.
r4.t5	.	.	+INF	.
r4.t6	.	.	+INF	.
r4.t7	.	.	+INF	.

r4.t8	.	.	+INF	.
r4.t9	.	.	+INF	.

---- VAR qlt débit en pipe l au temps t

	LOWER	LEVEL	UPPER	MARGINAL
s .j1.t1	.	.	+INF	.
s .j1.t2	.	99.182	+INF	.
s .j1.t3	.	99.182	+INF	.
s .j1.t4	.	86.126	+INF	.
s .j1.t5	.	.	+INF	.
s .j1.t6	.	.	+INF	.
s .j1.t7	.	.	+INF	.
s .j1.t8	.	.	+INF	.
s .j1.t9	.	.	+INF	.
j1.j2.t1	.	.	+INF	.
j1.j2.t2	.	76.830	+INF	.
j1.j2.t3	.	91.160	+INF	.
j1.j2.t4	.	45.000	+INF	.
j1.j2.t5	.	.	+INF	.
j1.j2.t6	.	.	+INF	.
j1.j2.t7	.	.	+INF	.
j1.j2.t8	.	.	+INF	.
j1.j2.t9	.	.	+INF	.
j1.r1.t1	.	.	+INF	.
j1.r1.t2	.	14.830	+INF	.
j1.r1.t3	.	.	+INF	.
j1.r1.t4	.	29.340	+INF	.
j1.r1.t5	.	.	+INF	.
j1.r1.t6	.	.	+INF	.
j1.r1.t7	.	.	+INF	.
j1.r1.t8	.	.	+INF	.
j1.r1.t9	.	.	+INF	.
j1.r4.t1	.	.	+INF	.
j1.r4.t2	.	7.522	+INF	.
j1.r4.t3	.	8.022	+INF	.
j1.r4.t4	.	11.786	+INF	.
j1.r4.t5	.	.	+INF	.
j1.r4.t6	.	.	+INF	.
j1.r4.t7	.	.	+INF	.
j1.r4.t8	.	.	+INF	.
j1.r4.t9	.	.	+INF	.
j2.r2.t1	.	.	+INF	.
j2.r2.t2	.	62.830	+INF	.
j2.r2.t3	.	.	+INF	.
j2.r2.t4	.	45.000	+INF	.
j2.r2.t5	.	.	+INF	.
j2.r2.t6	.	.	+INF	.
j2.r2.t7	.	.	+INF	.
j2.r2.t8	.	.	+INF	.
j2.r2.t9	.	.	+INF	.
j2.r3.t1	.	.	+INF	.
j2.r3.t2	.	14.000	+INF	.
j2.r3.t3	.	91.160	+INF	.
j2.r3.t4	.	.	+INF	.
j2.r3.t5	.	.	+INF	.
j2.r3.t6	.	.	+INF	.
j2.r3.t7	.	.	+INF	.
j2.r3.t8	.	.	+INF	.
j2.r3.t9	.	.	+INF	.

---- VAR vrt Volume d_eau dans les réservoirs r à la période t

	LOWER	LEVEL	UPPER	MARGINAL
r1.t1	.	100.000	+INF	.
r1.t2	.	105.000	+INF	.
r1.t3	.	100.000	+INF	.
r1.t4	.	125.670	+INF	.

r1.t5	.	119.170	+INF	.
r1.t6	.	113.500	+INF	.
r1.t7	.	106.000	+INF	.
r1.t8	.	103.000	+INF	.
r1.t9	.	100.000	+INF	.
r2.t1	.	100.000	+INF	.
r2.t2	.	118.000	+INF	.
r2.t3	.	100.000	+INF	.
r2.t4	.	145.000	+INF	.
r2.t5	.	145.000	+INF	.
r2.t6	.	145.000	+INF	.
r2.t7	.	145.000	+INF	.
r2.t8	.	145.000	+INF	.
r2.t9	.	100.000	+INF	.
r3.t1	.	100.000	+INF	.
r3.t2	.	100.000	+INF	.
r3.t3	.	177.830	+INF	.
r3.t4	.	152.330	+INF	.
r3.t5	.	141.330	+INF	.
r3.t6	.	131.330	+INF	.
r3.t7	.	121.330	+INF	.
r3.t8	.	110.330	+INF	.
r3.t9	.	100.000	+INF	.
r4.t1	.	100.000	+INF	.
r4.t2	.	106.522	+INF	.
r4.t3	.	113.544	+INF	.
r4.t4	.	116.830	+INF	.
r4.t5	.	107.330	+INF	.
r4.t6	.	103.330	+INF	.
r4.t7	.	101.000	+INF	.
r4.t8	.	101.000	+INF	.
r4.t9	.	100.000	+INF	.

---- VAR pkt Puissance de la pompe k à la période t

	LOWER	LEVEL	UPPER	MARGINAL
small.p1.t1	.	.	+INF	.
small.p1.t2	.	.	+INF	.
small.p1.t3	.	13.359	+INF	.
small.p1.t4	.	12.102	+INF	.
small.p1.t5	.	.	+INF	.
small.p1.t6	.	.	+INF	.
small.p1.t7	.	.	+INF	.
small.p1.t8	.	.	+INF	.
small.p1.t9	.	.	+INF	.
small.p2.t1	.	.	+INF	.
small.p2.t2	.	.	+INF	.
small.p2.t3	.	.	+INF	.
small.p2.t4	.	.	+INF	.
small.p2.t5	.	.	+INF	.
small.p2.t6	.	.	+INF	.
small.p2.t7	.	.	+INF	.
small.p2.t8	.	.	+INF	.
small.p2.t9	.	.	+INF	.
small.p3.t1	.	.	+INF	.
small.p3.t2	.	13.359	+INF	.
small.p3.t3	.	.	+INF	.
small.p3.t4	.	.	+INF	.
small.p3.t5	.	.	+INF	.
small.p3.t6	.	.	+INF	.
small.p3.t7	.	.	+INF	.
small.p3.t8	.	.	+INF	.
small.p3.t9	.	.	+INF	.

---- VAR xkt Pompe k allumé à la période t

	LOWER	LEVEL	UPPER	MARGINAL
small.p1.t1	.	.	1.000	0.111

small.p1.t2	.	.	1.000	0.111
small.p1.t3	.	1.000	1.000	0.111
small.p1.t4	.	1.000	1.000	0.111
small.p1.t5	.	.	1.000	0.176
small.p1.t6	.	.	1.000	0.176
small.p1.t7	.	.	1.000	0.176
small.p1.t8	.	.	1.000	0.176
small.p1.t9	.	.	1.000	0.176
small.p2.t1	.	.	1.000	0.111
small.p2.t2	.	.	1.000	0.111
small.p2.t3	.	.	1.000	0.111
small.p2.t4	.	.	1.000	0.111
small.p2.t5	.	.	1.000	0.176
small.p2.t6	.	.	1.000	0.176
small.p2.t7	.	.	1.000	0.176
small.p2.t8	.	.	1.000	0.176
small.p2.t9	.	.	1.000	0.176
small.p3.t1	.	.	1.000	0.111
small.p3.t2	.	1.000	1.000	0.111
small.p3.t3	.	.	1.000	0.111
small.p3.t4	.	.	1.000	0.111
small.p3.t5	.	.	1.000	0.176
small.p3.t6	.	.	1.000	0.176
small.p3.t7	.	.	1.000	0.176
small.p3.t8	.	.	1.000	0.176
small.p3.t9	.	.	1.000	0.176

	LOWER	LEVEL	UPPER	MARGINAL
---- VAR z	-INF	1.132	+INF	.

z Coût total

**** REPORT SUMMARY :

0	NONOPT
0	INFEASIBLE
0	UNBOUNDED
0	ERRORS

EXECUTION TIME = 0.066 SECONDS 4 MB 40.1.0 93c2a77b LEX-LEG

USER: NEOS Server License prod-exec-7.neos-server.orgS220203/0001AB-GEN
 mac@2c:ea:7f:71:ac:18 DCE1890
 License for teaching and research at degree granting institutions

**** FILE SUMMARY

Input /var/lib/condor/execute/dir_156616/gamsexec/MODEL.gms
 Output /var/lib/condor/execute/dir_156616/gamsexec/solve.lst

Additional Output:

[12508800-ISKfuVGq-solver-output.zip](#)

