

Table 1: SCIP Solver CFLP Instances

Name	original		$(\ell = 5)$		$(\ell = 4)$		$(\ell = 3)$		$(\ell = 2)$	
	generators	time	generators	time	generators	time	generators	time	generators	time
200	0	16.85	23	11.13	137	12.31	293	24.27	639	44.67
200	0	15.1	23	11.38	137	13.65	293	23.29	639	67.55
200	0	17.12	23	11.26	137	12.28	293	20.14	639	41.86
200	0	16.58	23	11.72	137	13.47	293	22.37	639	37.18
200	0	14.98	23	12.03	137	13.6	293	27.42	639	43.07
201	0	3600.0	29	3600.0	148	3600.0	300	3600.0	639	3600.0
201	0	3600.0	29	3600.0	148	3600.0	300	3600.0	639	3600.0
201	0	3600.0	29	3600.0	148	3600.0	300	3600.0	639	3600.0
201	0	3600.0	29	3600.0	148	3600.0	300	3600.0	639	3600.0
201	0	3600.0	29	3600.0	148	3600.0	300	3600.0	639	3600.0
202	0	3600.0	38	3600.0	160	3600.0	302	3600.0	639	3600.0
202	0	3600.0	38	3600.0	160	3600.0	302	3600.0	639	3600.0
202	0	3600.0	38	3600.0	160	3600.0	302	3600.0	639	3600.0
202	0	3600.0	38	3600.0	160	3600.0	302	3600.0	639	3600.0
202	0	3600.0	38	3600.0	160	3600.0	302	3600.0	639	3600.0
203	192	3600.0	192	3600.0	192	3600.0	592	3600.0	639	26.07
203	192	3600.0	192	3600.0	192	3600.0	592	3600.0	639	27.11
203	192	3600.0	192	3600.0	192	3600.0	592	3600.0	639	17.1
203	192	3600.0	192	3600.0	192	3600.0	592	3600.0	639	24.79
203	192	3600.0	192	3600.0	192	3600.0	592	3600.0	639	27.3
204	0	1829.61	294	3600.0	626	3600.0	820	3600.0	967	79.55
204	0	1987.01	294	3600.0	626	3600.0	820	2123.16	967	43.66
204	0	3204.08	294	3600.0	626	3600.0	820	824.5	967	47.45
204	0	2802.9	294	3600.0	626	3600.0	820	3600.0	967	56.12
204	0	2366.03	294	3600.0	626	3600.0	820	3600.0	967	33.6
205	0	757.13	323	1690.69	616	3308.67	806	154.18	968	19.98
205	0	619.51	323	2729.94	616	3600.0	806	59.23	968	11.0
205	0	744.11	323	2346.69	616	2186.49	806	614.5	968	20.41
205	0	631.31	323	3233.12	616	2134.15	806	246.62	968	9.19
205	0	816.16	323	3600.0	616	1847.09	806	81.7	968	13.2
206	0	2342.23	311	3600.0	623	3600.0	813	821.62	965	14.94
206	0	2037.03	311	3600.0	623	3600.0	813	724.71	965	43.19
206	0	2666.02	311	3600.0	623	3600.0	813	1331.39	965	12.58
206	0	2257.95	311	3600.0	623	3600.0	813	2101.68	965	11.69
206	0	2114.7	311	3600.0	623	3600.0	813	1014.6	965	9.32
207	725	3600.0	725	3600.0	725	3600.0	908	3600.0	1018	1.3
207	725	3600.0	725	3600.0	725	3600.0	908	3600.0	1018	1.3
207	725	3600.0	725	3600.0	725	3600.0	908	3600.0	1018	1.33

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Table 1 – *Continued from previous page*

Name	original		$(\ell = 5)$		$(\ell = 4)$		$(\ell = 3)$		$(\ell = 2)$	
	generators	time	generators	time	generators	time	generators	time	generators	time
207	725	3600.0	725	3600.0	725	3600.0	908	3600.0	1018	1.31
207	725	3600.0	725	3600.0	725	3600.0	908	3600.0	1018	1.35
208	0	121.38	10	61.09	81	46.89	173	728.48	255	111.96
208	0	325.5	10	46.59	81	48.01	173	190.14	255	102.65
208	0	97.7	10	43.65	81	52.04	173	148.38	255	140.96
208	0	114.46	10	60.87	81	43.5	173	144.66	255	139.27
208	0	101.75	10	46.54	81	47.73	173	138.92	255	154.23
209	0	81.03	7	66.11	70	79.59	197	166.55	255	263.44
209	0	73.41	7	86.74	70	52.54	197	261.91	255	1180.5
209	0	80.18	7	81.15	70	64.37	197	315.51	255	195.1
209	0	86.7	7	58.2	70	79.08	197	226.16	255	365.66
209	0	77.29	7	61.84	70	101.55	197	359.36	255	153.07
210	0	3600.0	9	127.07	82	45.34	181	407.2	255	190.11
210	0	3600.0	9	43.21	82	237.05	181	148.92	255	126.45
210	0	3600.0	9	66.44	82	52.89	181	164.01	255	246.9
210	0	3600.0	9	48.82	82	59.98	181	247.45	255	119.67
210	0	3600.0	9	122.62	82	64.43	181	363.03	255	246.51
211	112	3600.0	112	3600.0	112	3600.0	255	3600.0	255	124.24
211	112	3600.0	112	3600.0	112	3600.0	255	3600.0	255	71.98
211	112	3600.0	112	3600.0	112	3600.0	255	3600.0	255	112.59
211	112	3600.0	112	3600.0	112	3600.0	255	3600.0	255	124.87
211	112	3600.0	112	3600.0	112	3600.0	255	3600.0	255	110.1
212	0	194.45	7	383.34	82	370.42	127	492.68	127	735.26
212	0	289.96	7	186.25	82	221.05	127	692.81	127	782.57
212	0	256.12	7	210.97	82	329.57	127	695.14	127	806.56
212	0	198.43	7	178.34	82	261.02	127	574.38	127	938.46
212	0	217.83	7	165.75	82	240.77	127	495.83	127	1003.96
213	0	381.12	1	331.7	64	456.5	127	450.89	127	449.83
213	0	433.32	1	325.4	64	446.02	127	741.56	127	746.35
213	0	440.33	1	176.26	64	405.34	127	710.05	127	717.67
213	0	432.46	1	192.51	64	488.64	127	441.14	127	510.56
213	0	381.72	1	162.94	64	476.15	127	559.32	127	542.07
214	64	3600.0	64	3600.0	64	3600.0	127	3600.0	127	731.09
214	64	3600.0	64	3600.0	64	3600.0	127	3600.0	127	455.63
214	64	3600.0	64	3600.0	64	3600.0	127	3600.0	127	385.42
214	64	3600.0	64	3600.0	64	3600.0	127	3600.0	127	514.54
214	64	3600.0	64	3600.0	64	3600.0	127	3600.0	127	591.37
215	0	3600.0	3	3600.0	65	3600.0	127	3600.0	127	3600.0
215	0	3600.0	3	3600.0	65	3600.0	127	3600.0	127	3600.0
215	0	3600.0	3	3600.0	65	3600.0	127	3600.0	127	3600.0

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Table 1 – *Continued from previous page*

Name	original		$(\ell = 5)$		$(\ell = 4)$		$(\ell = 3)$		$(\ell = 2)$	
	generators	time	generators	time	generators	time	generators	time	generators	time
215	0	3600.0	3	3600.0	65	3600.0	127	3600.0	127	3600.0
215	0	3600.0	3	3600.0	65	3600.0	127	3600.0	127	3600.0
216	0	1041.78	77	3600.0	303	3600.0	510	1577.42	924	144.99
216	0	1685.66	77	3600.0	303	3600.0	510	1025.49	924	127.91
216	0	1487.29	77	3600.0	303	694.08	510	3600.0	924	633.9
216	0	3600.0	77	3600.0	303	3600.0	510	1443.54	924	182.7
216	0	1411.46	77	586.39	303	543.53	510	3600.0	924	110.98
217	0	3600.0	67	3600.0	292	3600.0	499	3600.0	902	3600.0
217	0	3600.0	67	3600.0	292	3600.0	499	3600.0	902	3600.0
217	0	3600.0	67	3600.0	292	3600.0	499	3600.0	902	3600.0
217	0	3600.0	67	3600.0	292	3600.0	499	3600.0	902	3600.0
217	0	3600.0	67	3600.0	292	3600.0	499	3600.0	902	3600.0
217	0	3600.0	67	3600.0	292	3600.0	499	3600.0	902	3600.0
218	0	3600.0	80	3600.0	291	3600.0	509	3600.0	902	3600.0
218	0	3600.0	80	3600.0	291	3600.0	509	3600.0	902	3600.0
218	0	3600.0	80	3600.0	291	3600.0	509	3600.0	902	3600.0
218	0	3600.0	80	3600.0	291	3600.0	509	3600.0	902	3600.0
218	0	3600.0	80	3600.0	291	3600.0	509	3600.0	902	3600.0
219	381	3600.0	381	3600.0	381	3600.0	718	3600.0	1048	4.0
219	381	3600.0	381	3600.0	381	3600.0	718	3600.0	1048	4.32
219	381	3600.0	381	3600.0	381	3600.0	718	3600.0	1048	4.08
219	381	3600.0	381	3600.0	381	3600.0	718	3600.0	1048	4.29
219	381	3600.0	381	3600.0	381	3600.0	718	3600.0	1048	4.03
220	14	1.31	14	1.06	14	1.41	74	1.79	198	3.68
220	14	0.98	14	0.7	14	0.67	74	2.24	198	3.61
220	14	0.37	14	0.4	14	0.43	74	1.64	198	3.91
220	14	1.5	14	0.4	14	0.38	74	1.5	198	3.75
220	14	0.93	14	1.07	14	0.8	74	3.38	198	3.69
221	0	0.32	2	0.32	9	0.96	30	1.22	194	3.83
221	0	0.87	2	0.3	9	0.78	30	1.23	194	3.62
221	0	0.24	2	0.35	9	0.77	30	1.12	194	4.13
221	0	0.4	2	0.31	9	0.86	30	0.94	194	4.34
221	0	0.41	2	0.46	9	0.73	30	1.83	194	3.52
222	0	0.32	0	0.3	9	0.38	26	1.62	168	4.88
222	0	0.34	0	0.29	9	1.02	26	1.22	168	5.71
222	0	0.35	0	0.3	9	0.37	26	1.71	168	4.91
222	0	0.52	0	0.29	9	0.92	26	1.13	168	5.81
222	0	0.33	0	0.31	9	0.92	26	0.96	168	6.76
223	0	0.31	0	0.3	10	0.32	25	1.03	171	4.14
223	0	0.48	0	0.28	10	0.31	25	0.8	171	3.32
223	0	0.31	0	0.3	10	0.33	25	0.38	171	4.18

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Table 1 – *Continued from previous page*

Name	original		$(\ell = 5)$		$(\ell = 4)$		$(\ell = 3)$		$(\ell = 2)$	
	generators	time	generators	time	generators	time	generators	time	generators	time
223	0	0.31	0	0.26	10	0.4	25	0.85	171	5.13
223	0	0.31	0	0.29	10	0.29	25	0.83	171	4.66
224	38	0.08	38	0.06	38	0.06	56	0.06	118	0.06
224	38	0.06	38	0.06	38	0.06	56	0.07	118	0.06
224	38	0.07	38	0.06	38	0.06	56	0.06	118	0.06
224	38	0.07	38	0.07	38	0.06	56	0.07	118	0.06
224	38	0.08	38	0.06	38	0.07	56	0.06	118	0.06
225	0	0.05	6	0.06	26	0.06	35	0.07	92	0.07
225	0	0.08	6	0.07	26	0.06	35	0.06	92	0.08
225	0	0.06	6	0.07	26	0.06	35	0.1	92	0.07
225	0	0.06	6	0.07	26	0.07	35	0.07	92	0.08
225	0	0.21	6	0.06	26	0.06	35	0.06	92	0.07
226	0	67.89	6	33.72	27	33.62	39	42.91	103	16.5
226	0	64.46	6	35.79	27	37.07	39	35.24	103	4.75
226	0	189.94	6	36.05	27	31.91	39	35.43	103	18.61
226	0	72.23	6	33.53	27	32.69	39	34.87	103	2.84
226	0	128.24	6	35.29	27	29.5	39	64.43	103	2.57
227	0	482.19	8	408.41	32	142.28	42	124.84	103	49.74
227	0	238.38	8	167.81	32	356.33	42	124.79	103	49.37
227	0	2219.11	8	148.33	32	397.09	42	283.83	103	0.33
227	0	342.9	8	283.65	32	185.65	42	124.77	103	43.26
227	0	505.47	8	176.43	32	145.62	42	442.82	103	53.68
228	84	5.87	84	3.53	84	3.22	209	6.04	348	19.77
228	84	2.22	84	1.97	84	1.67	209	5.44	348	19.36
228	84	1.92	84	1.75	84	1.61	209	2.5	348	19.56
228	84	1.78	84	1.73	84	1.94	209	2.34	348	19.61
228	84	4.69	84	3.3	84	3.28	209	4.7	348	22.48
229	0	1.28	10	0.66	56	2.84	119	12.8	324	20.16
229	0	0.93	10	0.68	56	2.8	119	8.51	324	20.08
229	0	0.73	10	0.76	56	2.38	119	9.39	324	22.14
229	0	1.07	10	0.73	56	3.07	119	14.9	324	19.53
229	0	1.15	10	0.63	56	2.66	119	11.92	324	20.69
230	0	0.84	5	0.64	55	1.25	116	16.09	318	18.31
230	0	0.95	5	0.65	55	2.6	116	7.73	318	18.73
230	0	1.07	5	0.72	55	1.28	116	7.28	318	21.49
230	0	1.14	5	0.72	55	1.24	116	6.9	318	30.29
230	0	0.91	5	0.68	55	2.5	116	16.51	318	18.97
231	0	1.35	10	1.28	55	4.72	113	10.43	321	21.6
231	0	0.69	10	1.19	55	4.77	113	18.9	321	17.83
231	0	0.79	10	1.19	55	4.03	113	7.68	321	24.29

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Table 1 – *Continued from previous page*

Name	original		$(\ell = 5)$		$(\ell = 4)$		$(\ell = 3)$		$(\ell = 2)$	
	generators	time	generators	time	generators	time	generators	time	generators	time
231	0	0.7	10	1.12	55	2.61	113	12.83	321	17.88
231	0	0.66	10	1.26	55	5.34	113	19.77	321	22.89
232	296	15.71	296	11.02	296	11.21	463	13.41	598	82.19
232	296	12.25	296	10.61	296	10.88	463	7.57	598	75.47
232	296	12.49	296	10.43	296	11.01	463	16.56	598	79.97
232	296	14.34	296	6.53	296	6.8	463	9.0	598	78.05
232	296	10.91	296	12.95	296	10.97	463	8.17	598	80.32
233	0	2.78	99	6.36	235	9.51	364	71.58	567	69.59
233	0	2.18	99	7.51	235	9.59	364	104.36	567	70.14
233	0	1.63	99	4.29	235	5.63	364	76.78	567	64.57
233	0	1.65	99	4.5	235	5.05	364	80.96	567	81.44
233	0	1.69	99	4.71	235	9.09	364	49.7	567	71.75
234	0	2.41	93	3.53	232	60.15	339	57.8	547	76.09
234	0	2.1	93	2.82	232	42.96	339	67.25	547	86.69
234	0	1.62	93	2.97	232	64.31	339	71.46	547	80.71
234	0	1.71	93	3.06	232	34.47	339	80.48	547	60.45
234	0	2.55	93	3.01	232	39.95	339	71.01	547	89.51
235	0	2.0	105	9.39	252	5.99	361	11.59	573	78.05
235	0	2.22	105	9.28	252	10.71	361	12.25	573	84.69
235	0	1.65	105	6.1	252	9.95	361	11.34	573	82.8
235	0	1.88	105	9.44	252	10.17	361	7.84	573	65.22
235	0	1.6	105	5.89	252	10.37	361	11.97	573	80.71
236	22	0.19	22	0.18	22	0.19	45	0.2	148	0.24
236	22	0.27	22	0.17	22	0.18	45	0.46	148	0.21
236	22	0.28	22	0.19	22	0.18	45	0.2	148	0.72
236	22	0.2	22	0.17	22	0.17	45	0.2	148	0.21
236	22	0.27	22	0.17	22	0.18	45	0.22	148	0.22
237	0	0.23	1	0.16	11	0.21	14	0.2	128	0.22
237	0	0.21	1	0.15	11	0.17	14	0.2	128	0.23
237	0	0.33	1	0.16	11	0.18	14	0.21	128	0.22
237	0	0.65	1	0.16	11	0.17	14	0.38	128	0.2
237	0	0.18	1	0.17	11	0.19	14	0.21	128	0.21
238	0	3600.0	2	3600.0	13	3600.0	23	3600.0	123	3600.0
238	0	3600.0	2	3600.0	13	3600.0	23	3600.0	123	3600.0
238	0	3600.0	2	3600.0	13	3600.0	23	3600.0	123	3600.0
238	0	3600.0	2	3600.0	13	3600.0	23	3600.0	123	3600.0
238	0	3600.0	2	3600.0	13	3600.0	23	3600.0	123	3600.0
239	0	3600.0	1	3600.0	10	3600.0	16	3600.0	123	3600.0
239	0	3600.0	1	3600.0	10	3600.0	16	3600.0	123	3600.0
239	0	3600.0	1	3600.0	10	3600.0	16	3600.0	123	3600.0

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Table 1 – *Continued from previous page*

Name	original		$(\ell = 5)$		$(\ell = 4)$		$(\ell = 3)$		$(\ell = 2)$	
	generators	time	generators	time	generators	time	generators	time	generators	time
239	0	3600.0	1	3600.0	10	3600.0	16	3600.0	123	3600.0
239	0	3600.0	1	3600.0	10	3600.0	16	3600.0	123	3600.0
240	0	1042.15	61	32.15	272	57.15	426	29.65	426	192.05
240	0	3600.0	61	19.66	272	48.13	426	66.98	426	127.37
240	0	375.65	61	26.45	272	79.79	426	276.16	426	168.39
240	0	1392.74	61	27.03	272	62.36	426	84.35	426	237.21
240	0	3600.0	61	30.29	272	40.12	426	57.39	426	130.03
241	0	3600.0	46	51.45	267	29.03	426	89.88	426	266.18
241	0	3600.0	46	23.96	267	63.67	426	101.57	426	133.08
241	0	3600.0	46	80.04	267	32.64	426	124.43	426	139.21
241	0	3600.0	46	53.38	267	36.1	426	184.9	426	118.94
241	0	3600.0	46	53.71	267	91.91	426	68.97	426	123.84
242	0	3600.0	59	3600.0	285	3600.0	426	3600.0	426	3600.0
242	0	3600.0	59	3600.0	285	3600.0	426	3600.0	426	3600.0
242	0	3600.0	59	3600.0	285	3600.0	426	3600.0	426	3600.0
242	0	3600.0	59	3600.0	285	3600.0	426	3600.0	426	3600.0
242	0	3600.0	59	3600.0	285	3600.0	426	3600.0	426	3600.0
243	353	3600.0	353	3600.0	353	3600.0	426	3600.0	426	150.16
243	353	3600.0	353	3600.0	353	3600.0	426	3600.0	426	47.71
243	353	3600.0	353	3600.0	353	3600.0	426	3600.0	426	45.03
243	353	3600.0	353	3600.0	353	3600.0	426	3600.0	426	47.49
243	353	3600.0	353	3600.0	353	3600.0	426	3600.0	426	54.65
244	0	425.0	569	467.99	1065	205.16	1297	178.04	1467	57.1
244	0	682.83	569	450.98	1065	129.43	1297	69.93	1467	15.26
244	0	368.96	569	252.14	1065	168.26	1297	91.62	1467	18.45
244	0	2080.53	569	578.72	1065	181.41	1297	38.07	1467	12.52
244	0	473.97	569	272.36	1065	121.89	1297	51.19	1467	20.2
245	3	857.3	577	141.76	1068	45.95	1300	40.34	1467	23.21
245	3	861.46	577	112.61	1068	45.38	1300	18.31	1467	27.42
245	3	629.59	577	48.81	1068	76.59	1300	38.53	1467	72.56
245	3	805.02	577	87.91	1068	66.49	1300	23.21	1467	56.08
245	3	614.63	577	116.15	1068	51.85	1300	40.93	1467	22.27
246	1201	3156.73	1201	3242.92	1201	3600.0	1402	3600.0	1500	2.81
246	1201	2176.87	1201	2276.81	1201	3600.0	1402	3600.0	1500	2.86
246	1201	3600.0	1201	3600.0	1201	3600.0	1402	3600.0	1500	2.77
246	1201	1372.53	1201	1378.85	1201	3600.0	1402	3600.0	1500	2.93
246	1201	2707.88	1201	2819.35	1201	3600.0	1402	3600.0	1500	9.24
247	0	156.71	593	288.0	1072	92.79	1301	39.8	1463	43.58
247	0	239.36	593	212.34	1072	36.43	1301	21.75	1463	24.78
247	0	182.27	593	440.68	1072	45.66	1301	40.75	1463	4.92

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Table 1 – *Continued from previous page*

Name	original		$(\ell = 5)$		$(\ell = 4)$		$(\ell = 3)$		$(\ell = 2)$	
	generators	time	generators	time	generators	time	generators	time	generators	time
247	0	190.92	593	171.97	1072	47.29	1301	17.02	1463	17.94
247	0	185.67	593	149.08	1072	90.76	1301	33.62	1463	20.61
248	170	224.59	170	207.07	170	649.78	170	1810.18	170	190.39
248	170	1023.52	170	712.01	170	813.77	170	1351.52	170	324.49
248	170	569.95	170	465.74	170	354.93	170	456.13	170	832.68
248	170	2523.71	170	2376.52	170	719.0	170	1118.93	170	258.73
248	170	840.09	170	603.34	170	766.06	170	1285.02	170	229.65
249	0	3600.0	23	3600.0	150	3600.0	170	3600.0	170	3600.0
249	0	3600.0	23	3600.0	150	3600.0	170	3600.0	170	3600.0
249	0	3600.0	23	3600.0	150	3600.0	170	3600.0	170	3600.0
249	0	3600.0	23	3600.0	150	3600.0	170	3600.0	170	3600.0
249	0	3600.0	23	3600.0	150	3600.0	170	3600.0	170	3600.0
250	0	293.52	9	117.79	160	110.99	170	267.33	170	1416.22
250	0	352.05	9	87.24	160	93.17	170	292.1	170	255.79
250	0	304.74	9	100.03	160	125.82	170	249.71	170	375.48
250	0	307.54	9	96.11	160	93.78	170	388.48	170	516.16
250	0	402.38	9	64.15	160	139.44	170	278.29	170	358.83
251	0	3600.0	16	3600.0	139	3600.0	170	3600.0	170	3600.0
251	0	3600.0	16	3600.0	139	3600.0	170	3600.0	170	3600.0
251	0	3600.0	16	3600.0	139	3600.0	170	3600.0	170	3600.0
251	0	3600.0	16	3600.0	139	3600.0	170	3600.0	170	3600.0
251	0	3600.0	16	3600.0	139	3600.0	170	3600.0	170	3600.0
252	85	975.14	85	925.08	85	1252.27	85	1151.63	85	3466.32
252	85	1216.04	85	1045.04	85	626.15	85	3402.38	85	3376.32
252	85	594.25	85	508.29	85	1200.0	85	2511.54	85	3019.64
252	85	2640.25	85	689.9	85	1027.72	85	1595.47	85	3600.0
252	85	1210.52	85	1029.89	85	1071.42	85	3600.0	85	3600.0
253	0	3600.0	2	1116.16	85	1627.15	85	3600.0	85	3600.0
253	0	3600.0	2	1123.42	85	1286.81	85	2779.02	85	3340.82
253	0	3600.0	2	2372.93	85	3260.76	85	1646.41	85	3600.0
253	0	3600.0	2	2027.52	85	3455.37	85	3600.0	85	3600.0
253	0	3600.0	2	1839.43	85	3042.38	85	3600.0	85	3600.0
254	0	372.64	1	3600.0	85	1903.22	85	3600.0	85	3600.0
254	0	416.62	1	2565.63	85	3600.0	85	2189.83	85	3600.0
254	0	508.9	1	1973.57	85	3600.0	85	3600.0	85	3600.0
254	0	508.79	1	1312.02	85	1895.03	85	2391.06	85	3600.0
254	0	322.53	1	1714.7	85	2868.16	85	3600.0	85	3600.0
255	0	3600.0	11	1253.6	85	2209.71	85	3600.0	85	3600.0
255	0	3600.0	11	2063.65	85	1290.53	85	3600.0	85	3600.0
255	0	3600.0	11	3600.0	85	2331.47	85	3600.0	85	3600.0

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Table 1 – *Continued from previous page*

Name	original		$(\ell = 5)$		$(\ell = 4)$		$(\ell = 3)$		$(\ell = 2)$	
	generators	time	generators	time	generators	time	generators	time	generators	time
255	0	3600.0	11	1101.91	85	3600.0	85	1977.64	85	3600.0
255	0	3600.0	11	1352.91	85	3600.0	85	3176.86	85	1899.52
256	0	7.94	170	8.96	568	10.18	852	13.54	852	26.94
256	0	8.2	170	28.49	568	35.6	852	14.44	852	26.24
256	0	9.43	170	27.77	568	39.41	852	12.56	852	104.81
256	0	7.57	170	27.37	568	35.94	852	15.27	852	87.46
256	0	10.66	170	9.23	568	11.29	852	11.14	852	22.98
257	0	3600.0	146	3600.0	554	3600.0	852	3600.0	852	3600.0
257	0	3600.0	146	3600.0	554	3600.0	852	3600.0	852	3600.0
257	0	3600.0	146	3600.0	554	3600.0	852	3600.0	852	3600.0
257	0	3600.0	146	3600.0	554	3600.0	852	3600.0	852	3600.0
257	0	3600.0	146	3600.0	554	3600.0	852	3600.0	852	3600.0
258	723	3600.0	723	3600.0	723	3600.0	852	3600.0	852	21.45
258	723	3600.0	723	3600.0	723	3600.0	852	3600.0	852	6.5
258	723	3600.0	723	3600.0	723	3600.0	852	3600.0	852	6.92
258	723	3600.0	723	3600.0	723	3600.0	852	3600.0	852	6.84
258	723	3600.0	723	3600.0	723	3600.0	852	3600.0	852	6.84
259	0	3600.0	176	3600.0	583	3600.0	852	3600.0	852	138.11
259	0	3600.0	176	3600.0	583	3600.0	852	3600.0	852	125.23
259	0	3600.0	176	3600.0	583	3600.0	852	3600.0	852	130.46
259	0	3600.0	176	3600.0	583	3600.0	852	3600.0	852	155.9
259	0	3600.0	176	3600.0	583	3600.0	852	3600.0	852	149.01
260	319	3600.0	319	3600.0	319	3600.0	319	3600.0	319	78.57
260	319	3600.0	319	3600.0	319	3600.0	319	3600.0	319	76.4
260	319	3600.0	319	3600.0	319	3600.0	319	3600.0	319	70.47
260	319	3600.0	319	3600.0	319	3600.0	319	3600.0	319	73.41
260	319	3600.0	319	3600.0	319	3600.0	319	3600.0	319	85.3
261	0	3600.0	102	3600.0	319	3600.0	319	3600.0	319	3600.0
261	0	3600.0	102	3600.0	319	3600.0	319	3600.0	319	3600.0
261	0	3600.0	102	3600.0	319	3600.0	319	3600.0	319	3600.0
261	0	3600.0	102	3600.0	319	3600.0	319	3600.0	319	3600.0
261	0	3600.0	102	3600.0	319	3600.0	319	3600.0	319	3600.0
262	0	3600.0	92	3600.0	319	3600.0	319	3600.0	319	3600.0
262	0	3600.0	92	3600.0	319	3600.0	319	3600.0	319	3600.0
262	0	3600.0	92	3600.0	319	3600.0	319	3600.0	319	3600.0
262	0	3600.0	92	3600.0	319	3600.0	319	3600.0	319	3600.0
262	0	3600.0	92	3600.0	319	3600.0	319	3600.0	319	3600.0
263	0	3600.0	115	3600.0	319	3600.0	319	3600.0	319	3600.0
263	0	3600.0	115	3600.0	319	3600.0	319	3600.0	319	3600.0
263	0	3600.0	115	3600.0	319	3600.0	319	3600.0	319	3600.0

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Table 1 – *Continued from previous page*

Name	original		$(\ell = 5)$		$(\ell = 4)$		$(\ell = 3)$		$(\ell = 2)$	
	generators	time	generators	time	generators	time	generators	time	generators	time
263	0	3600.0	115	3600.0	319	3600.0	319	3600.0	319	3600.0
263	0	3600.0	115	3600.0	319	3600.0	319	3600.0	319	3600.0
264	1500	70.51	1500	66.27	1500	46.59	1500	22.46	1500	4.18
264	1500	61.27	1500	59.33	1500	11.18	1500	12.6	1500	4.17
264	1500	53.05	1500	52.85	1500	38.15	1500	8.71	1500	5.64
264	1500	79.82	1500	80.4	1500	193.77	1500	12.39	1500	3.94
264	1500	107.36	1500	104.09	1500	33.99	1500	14.32	1500	3.82
265	1	2030.39	893	3600.0	1500	3600.0	1500	3600.0	1500	118.69
265	1	3600.0	893	3600.0	1500	3600.0	1500	3600.0	1500	153.82
265	1	2083.43	893	3600.0	1500	3600.0	1500	3600.0	1500	92.01
265	1	3173.47	893	3600.0	1500	3600.0	1500	3600.0	1500	358.92
265	1	2585.95	893	3600.0	1500	3600.0	1500	3600.0	1500	92.19
266	0	3600.0	903	173.76	1500	92.43	1500	32.2	1500	53.91
266	0	1633.39	903	399.7	1500	96.93	1500	31.36	1500	25.18
266	0	1432.96	903	424.5	1500	174.57	1500	46.3	1500	31.15
266	0	814.3	903	452.2	1500	389.75	1500	38.34	1500	20.19
266	0	1337.58	903	489.0	1500	127.18	1500	31.3	1500	52.95
267	0	3149.39	922	1732.99	1500	1330.32	1500	135.1	1500	100.98
267	0	3240.23	922	1492.2	1500	3600.0	1500	97.37	1500	88.68
267	0	3257.03	922	2217.54	1500	1159.96	1500	175.91	1500	69.06
267	0	3600.0	922	3600.0	1500	1065.01	1500	85.72	1500	77.79
267	0	1380.74	922	1672.47	1500	3600.0	1500	154.84	1500	166.17
268	127	1092.57	127	969.4	127	1367.45	127	2641.76	127	703.26
268	127	1740.69	127	1807.78	127	539.39	127	2503.18	127	683.86
268	127	484.93	127	483.95	127	1733.57	127	3600.0	127	2669.33
268	127	1555.49	127	1653.97	127	1487.9	127	3123.11	127	1135.89
268	127	1344.53	127	1251.37	127	1911.6	127	3600.0	127	977.57
269	0	3600.0	31	3600.0	127	3600.0	127	3600.0	127	3392.83
269	0	3600.0	31	3600.0	127	3600.0	127	3600.0	127	3600.0
269	0	3600.0	31	3600.0	127	3600.0	127	3600.0	127	3600.0
269	0	3600.0	31	3600.0	127	3600.0	127	3600.0	127	3600.0
269	0	3600.0	31	3600.0	127	3600.0	127	3600.0	127	3398.06
270	0	3600.0	28	3600.0	127	3600.0	127	3600.0	127	3173.01
270	0	3600.0	28	3600.0	127	3600.0	127	3600.0	127	579.13
270	0	3600.0	28	3600.0	127	3600.0	127	3600.0	127	2223.02
270	0	3600.0	28	3600.0	127	3600.0	127	3600.0	127	3054.05
270	0	3600.0	28	3600.0	127	3600.0	127	3600.0	127	3471.92
271	0	3600.0	20	3600.0	127	3600.0	127	3600.0	127	2968.94
271	0	3600.0	20	3600.0	127	3600.0	127	3600.0	127	2893.41
271	0	3600.0	20	3600.0	127	3600.0	127	3600.0	127	1943.98

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Table 1 – *Continued from previous page*

Name	original		$(\ell = 5)$		$(\ell = 4)$		$(\ell = 3)$		$(\ell = 2)$	
	generators	time	generators	time	generators	time	generators	time	generators	time
271	0	3600.0	20	3600.0	127	3600.0	127	3600.0	127	1985.37
271	0	3600.0	20	3600.0	127	3600.0	127	3600.0	127	2579.94
272	63	2992.89	63	2969.3	63	3115.0	63	3600.0	63	3600.0
272	63	2130.8	63	3600.0	63	1846.23	63	3600.0	63	3600.0
272	63	1948.31	63	3600.0	63	1524.14	63	3600.0	63	3600.0
272	63	2827.28	63	3600.0	63	2354.58	63	3600.0	63	3600.0
272	63	1600.74	63	3600.0	63	1682.94	63	3600.0	63	3600.0
273	0	3600.0	19	3600.0	63	3600.0	63	3600.0	63	3600.0
273	0	3600.0	19	3600.0	63	3600.0	63	3600.0	63	3600.0
273	0	3600.0	19	3600.0	63	3600.0	63	3600.0	63	3600.0
273	0	3600.0	19	3600.0	63	3600.0	63	3600.0	63	3600.0
273	0	3600.0	19	3600.0	63	3600.0	63	3600.0	63	3600.0
274	0	3600.0	11	3600.0	63	3600.0	63	3600.0	63	3600.0
274	0	3600.0	11	3600.0	63	3600.0	63	3600.0	63	3600.0
274	0	3600.0	11	3600.0	63	3600.0	63	3600.0	63	3600.0
274	0	3600.0	11	3600.0	63	3600.0	63	3600.0	63	3600.0
274	0	3600.0	11	3600.0	63	3600.0	63	3600.0	63	3600.0
274	0	3600.0	11	3600.0	63	3600.0	63	3600.0	63	3600.0
275	0	3600.0	17	3600.0	63	3600.0	63	3600.0	63	3600.0
275	0	3600.0	17	3600.0	63	3600.0	63	3600.0	63	3600.0
275	0	3600.0	17	3600.0	63	3600.0	63	3600.0	63	3600.0
275	0	3600.0	17	3600.0	63	3600.0	63	3600.0	63	3600.0
275	0	3600.0	17	3600.0	63	3600.0	63	3600.0	63	3600.0
276	639	3600.0	639	3600.0	639	3600.0	639	2618.2	639	12.01
276	639	3600.0	639	3600.0	639	3600.0	639	2792.94	639	11.89
276	639	3600.0	639	3600.0	639	3600.0	639	2660.81	639	11.82
276	639	3600.0	639	3600.0	639	3600.0	639	2633.77	639	13.14
276	639	3600.0	639	3600.0	639	3600.0	639	2652.9	639	13.38
277	0	3600.0	269	3600.0	639	3600.0	639	3600.0	639	3600.0
277	0	3600.0	269	3600.0	639	3600.0	639	3600.0	639	3600.0
277	0	3600.0	269	3600.0	639	3600.0	639	3600.0	639	3600.0
277	0	3600.0	269	3600.0	639	3600.0	639	3600.0	639	3600.0
277	0	3600.0	269	3600.0	639	3600.0	639	3600.0	639	3600.0
278	0	3600.0	262	3600.0	639	3600.0	639	3600.0	639	171.84
278	0	3600.0	262	3600.0	639	3600.0	639	3600.0	639	193.5
278	0	3600.0	262	3600.0	639	3600.0	639	3600.0	639	155.64
278	0	3600.0	262	3600.0	639	3600.0	639	3600.0	639	153.36
278	0	3600.0	262	3600.0	639	3600.0	639	3600.0	639	136.93
279	0	3600.0	277	3600.0	639	3600.0	639	3600.0	639	3600.0
279	0	3600.0	277	3600.0	639	3600.0	639	3600.0	639	3600.0
279	0	3600.0	277	3600.0	639	3600.0	639	3600.0	639	3600.0

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Table 1 – *Continued from previous page*

Name	original		$(\ell = 5)$		$(\ell = 4)$		$(\ell = 3)$		$(\ell = 2)$	
	generators	time	generators	time	generators	time	generators	time	generators	time
279	0	3600.0	277	3600.0	639	3600.0	639	3600.0	639	3600.0
279	0	3600.0	277	3600.0	639	3600.0	639	3600.0	639	3600.0
280	0	3600.0	3	3600.0	61	3600.0	110	3600.0	484	3600.0
280	0	3600.0	3	3600.0	61	3600.0	110	3600.0	484	3600.0
280	0	3600.0	3	3600.0	61	3600.0	110	3600.0	484	3600.0
280	0	3600.0	3	3600.0	61	3600.0	110	3600.0	484	3600.0
280	0	3600.0	3	3600.0	61	3600.0	110	3600.0	484	3600.0
280	0	3600.0	3	3600.0	61	3600.0	110	3600.0	484	3600.0
281	0	3600.0	6	3600.0	46	3600.0	109	3600.0	451	3600.0
281	0	3600.0	6	3600.0	46	3600.0	109	3600.0	451	3600.0
281	0	3600.0	6	3600.0	46	3600.0	109	3600.0	451	3600.0
281	0	3600.0	6	3600.0	46	3600.0	109	3600.0	451	3600.0
281	0	3600.0	6	3600.0	46	3600.0	109	3600.0	451	3600.0
282	0	3600.0	6	3600.0	58	3600.0	117	3600.0	451	3600.0
282	0	3600.0	6	3600.0	58	3600.0	117	3600.0	451	3600.0
282	0	3600.0	6	3600.0	58	3600.0	117	3600.0	451	3600.0
282	0	3600.0	6	3600.0	58	3600.0	117	3600.0	451	3600.0
282	0	3600.0	6	3600.0	58	3600.0	117	3600.0	451	3600.0
283	57	3600.0	57	3600.0	57	3600.0	251	3600.0	598	3.35
283	57	3600.0	57	3600.0	57	3600.0	251	3600.0	598	3.2
283	57	3600.0	57	3600.0	57	3600.0	251	3600.0	598	9.05
283	57	3600.0	57	3600.0	57	3600.0	251	3600.0	598	7.48
283	57	3600.0	57	3600.0	57	3600.0	251	3600.0	598	3.2
284	306	1.01	306	3.73	306	0.93	418	1.16	518	0.47
284	306	1.18	306	3.98	306	0.99	418	1.16	518	0.54
284	306	1.75	306	3.97	306	0.94	418	1.31	518	0.53
284	306	0.98	306	3.6	306	1.08	418	1.16	518	0.47
284	306	1.05	306	3.86	306	0.93	418	1.22	518	0.55
285	0	81.0	79	567.8	257	289.21	355	44.28	473	10.44
285	0	71.09	79	130.34	257	334.51	355	25.28	473	2.57
285	0	77.54	79	148.37	257	413.12	355	44.43	473	13.33
285	0	76.47	79	198.35	257	260.69	355	26.03	473	2.92
285	0	80.65	79	102.59	257	643.13	355	53.11	473	11.5
286	0	752.2	77	1586.41	237	1257.14	349	1336.39	469	25.82
286	0	1038.61	77	1141.32	237	1792.82	349	2055.74	469	36.17
286	0	758.43	77	1775.76	237	2209.72	349	1788.81	469	120.87
286	0	2096.41	77	1550.92	237	1714.62	349	2815.33	469	35.33
286	0	1037.21	77	1152.2	237	2673.0	349	3273.91	469	27.68
287	0	187.98	95	134.89	261	132.87	369	2.08	478	1.29
287	0	248.46	95	140.27	261	142.29	369	34.23	478	2.65
287	0	232.25	95	150.6	261	166.92	369	110.69	478	1.17

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Table 1 – *Continued from previous page*

Name	original		$(\ell = 5)$		$(\ell = 4)$		$(\ell = 3)$		$(\ell = 2)$	
	generators	time	generators	time	generators	time	generators	time	generators	time
287	0	204.48	95	369.52	261	568.47	369	101.33	478	0.98
287	0	259.05	95	132.87	261	136.75	369	32.45	478	2.74
288	0	17.76	1	16.05	39	23.59	84	23.6	510	50.53
288	0	18.25	1	17.22	39	66.16	84	33.5	510	42.13
288	0	18.31	1	48.64	39	23.66	84	25.56	510	33.84
288	0	18.89	1	17.08	39	19.38	84	39.29	510	24.5
288	0	18.27	1	19.27	39	18.31	84	26.41	510	108.15
289	0	37.16	2	16.93	40	15.57	98	36.91	510	135.13
289	0	39.89	2	52.79	40	15.58	98	30.06	510	37.4
289	0	39.5	2	16.4	40	18.81	98	36.75	510	31.11
289	0	40.02	2	18.27	40	19.48	98	28.2	510	45.55
289	0	42.95	2	17.84	40	14.29	98	32.8	510	39.01
290	43	3600.0	43	3600.0	43	3600.0	351	3600.0	510	25.36
290	43	3600.0	43	3600.0	43	3600.0	351	3600.0	510	37.62
290	43	3600.0	43	3600.0	43	3600.0	351	3600.0	510	39.31
290	43	3600.0	43	3600.0	43	3600.0	351	3600.0	510	55.74
290	43	3600.0	43	3600.0	43	3600.0	351	3600.0	510	32.75
291	0	3600.0	0	3600.0	17	3600.0	82	3600.0	510	3600.0
291	0	3600.0	0	3600.0	17	3600.0	82	3600.0	510	3600.0
291	0	3600.0	0	3600.0	17	3600.0	82	3600.0	510	3600.0
291	0	3600.0	0	3600.0	17	3600.0	82	3600.0	510	3600.0
291	0	3600.0	0	3600.0	17	3600.0	82	3600.0	510	3600.0
292	77	93.92	77	111.48	77	99.54	256	281.29	256	1040.05
292	77	108.37	77	99.93	77	96.73	256	352.48	256	911.05
292	77	87.36	77	91.28	77	90.01	256	430.65	256	1048.65
292	77	124.01	77	135.33	77	110.6	256	339.39	256	3299.19
292	77	102.28	77	111.44	77	114.61	256	273.46	256	1226.0
293	0	44.26	1	42.68	54	349.28	138	1191.08	256	1143.58
293	0	49.09	1	52.93	54	64.56	138	358.72	256	1108.72
293	0	50.22	1	46.74	54	84.79	138	470.94	256	1172.73
293	0	44.43	1	57.44	54	321.14	138	388.77	256	905.54
293	0	59.81	1	45.45	54	329.78	138	330.87	256	1038.96
294	0	116.29	1	60.62	48	324.62	136	309.99	256	1271.2
294	0	116.14	1	43.29	48	369.65	136	367.86	256	1136.94
294	0	112.18	1	45.4	48	85.74	136	303.65	256	1383.38
294	0	110.72	1	49.92	48	76.72	136	360.72	256	1234.92
294	0	114.37	1	45.36	48	88.79	136	374.77	256	1320.08
295	0	107.16	1	44.75	31	100.88	118	273.0	256	1186.07
295	0	103.41	1	43.63	31	105.65	118	317.34	256	1188.08
295	0	113.82	1	112.63	31	78.09	118	389.87	256	1102.29

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Table 1 – *Continued from previous page*

Name	original		$(\ell = 5)$		$(\ell = 4)$		$(\ell = 3)$		$(\ell = 2)$	
	generators	time	generators	time	generators	time	generators	time	generators	time
295	0	113.93	1	54.76	31	83.41	118	791.15	256	1065.28
295	0	106.96	1	35.6	31	78.47	118	1378.89	256	1159.27
296	142	1.83	142	1.91	142	2.0	315	9.88	548	1.45
296	142	2.14	142	1.98	142	1.94	315	9.7	548	1.44
296	142	1.72	142	1.73	142	2.02	315	9.6	548	1.44
296	142	2.17	142	2.14	142	1.97	315	10.72	548	1.42
296	142	2.48	142	1.99	142	2.22	315	10.63	548	1.41
297	0	3600.0	19	3600.0	109	3600.0	198	3600.0	462	3600.0
297	0	3600.0	19	3600.0	109	3600.0	198	3600.0	462	3600.0
297	0	3600.0	19	3600.0	109	3600.0	198	3600.0	462	3600.0
297	0	3600.0	19	3600.0	109	3600.0	198	3600.0	462	3600.0
297	0	3600.0	19	3600.0	109	3600.0	198	3600.0	462	3600.0
298	0	3600.0	24	3600.0	102	3600.0	176	3600.0	431	3600.0
298	0	3600.0	24	3600.0	102	3600.0	176	3600.0	431	3600.0
298	0	3600.0	24	3600.0	102	3600.0	176	3600.0	431	3600.0
298	0	3600.0	24	3600.0	102	3600.0	176	3600.0	431	3600.0
298	0	3600.0	24	3600.0	102	3600.0	176	3600.0	431	3600.0
299	0	3600.0	28	3600.0	103	3600.0	195	3600.0	458	3600.0
299	0	3600.0	28	3600.0	103	3600.0	195	3600.0	458	3600.0
299	0	3600.0	28	3600.0	103	3600.0	195	3600.0	458	3600.0
299	0	3600.0	28	3600.0	103	3600.0	195	3600.0	458	3600.0
299	0	3600.0	28	3600.0	103	3600.0	195	3600.0	458	3600.0