

Summary

December 6, 2024

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0.1 Loaded Graphs

0.1.1 g_{0}



File: out/001_g_0_10300000



File: out/003_g_0_11310100

0.1.2 g_{1}



File: out/005_g_1_10300000

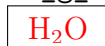


File: out/007_g_1_11310100

0.1.3 g_{2}



File: out/009_g_2_10300000



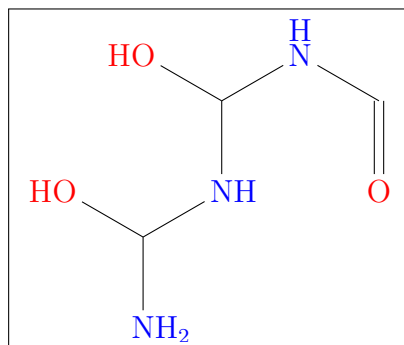
File: out/011_g_2_11310100

0.2 Product Graphs

0.2.1 p_{0,56}



File: out/013_g_1088_10300000



File: out/015_g_1088_11310100

0.3 Enumerated Flows

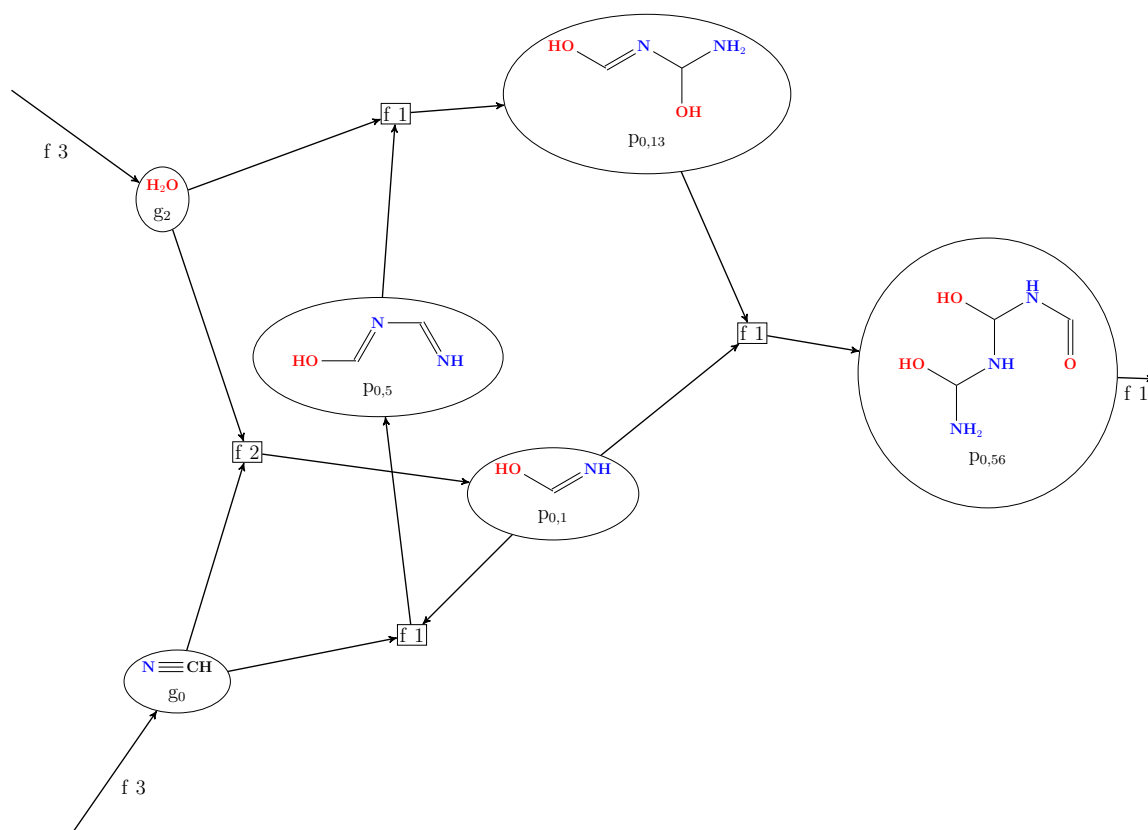
0.3.1 Solution 0

Overall Data

Objective value (non-integral): -0.0982654

Vertex/Graph	In	Out	G	logK	t_order
g_{0}	3	0	-5.507152	-3.000000	0
g_{2}	3	0	-5.068043	-3.000000	0
p_{0,13}	0	0	-21.240678	-3.000000	3
p_{0,1}	0	0	-10.610101	-3.000000	1
p_{0,56}	0	1	-31.869324	-6.000000	67
p_{0,5}	0	0	-16.158998	-6.000000	2

Filtered Graph



File: out/027_dg_0_11100_f_0_0_filt

Vertex	InFlow	OutFlow	$x_v^{\Delta G^0}$	x_v^K	$x_v^{\Delta G}$	t_v
g_0	3	0	-14459.025578	-3.0	-14469.002933	0
g_2	3	0	-13306.144961	-3.0	-13316.122316	0
$p_{0,1}$	0	0	-27856.817054	-3.0	-27866.79441	1
$p_{0,5}$	0	0	-42425.44262	-6.0	-42445.397331	2
$p_{0,13}$	0	0	-55767.391129	-3.0	-55777.368484	3
$p_{0,56}$	0	1	-83672.898792	-6.0	-83692.853502	67

Hyperedge	Source	Target	Flow	$x_e^{\Delta G}$	$\bar{x}_e^{\Delta G}$
6	$g_0, g_2,$	$p_{0,1},$	2	-82.342632	-82.342632
14	$g_0, p_{0,1},$	$p_{0,5},$	1	-109.599988	-109.599988
123	$g_2, p_{0,5},$	$p_{0,13},$	1	-17.19578	-17.19578
263	$p_{0,1}, p_{0,13},$	$p_{0,56},$	1	-48.690609	-48.690609
Sum				-257.99578301183334	

$$\Delta G = -34.01716346808946$$

$$\Delta E = -0.09826540409006926$$

$$|E| = 5$$

$$|U| = 4$$

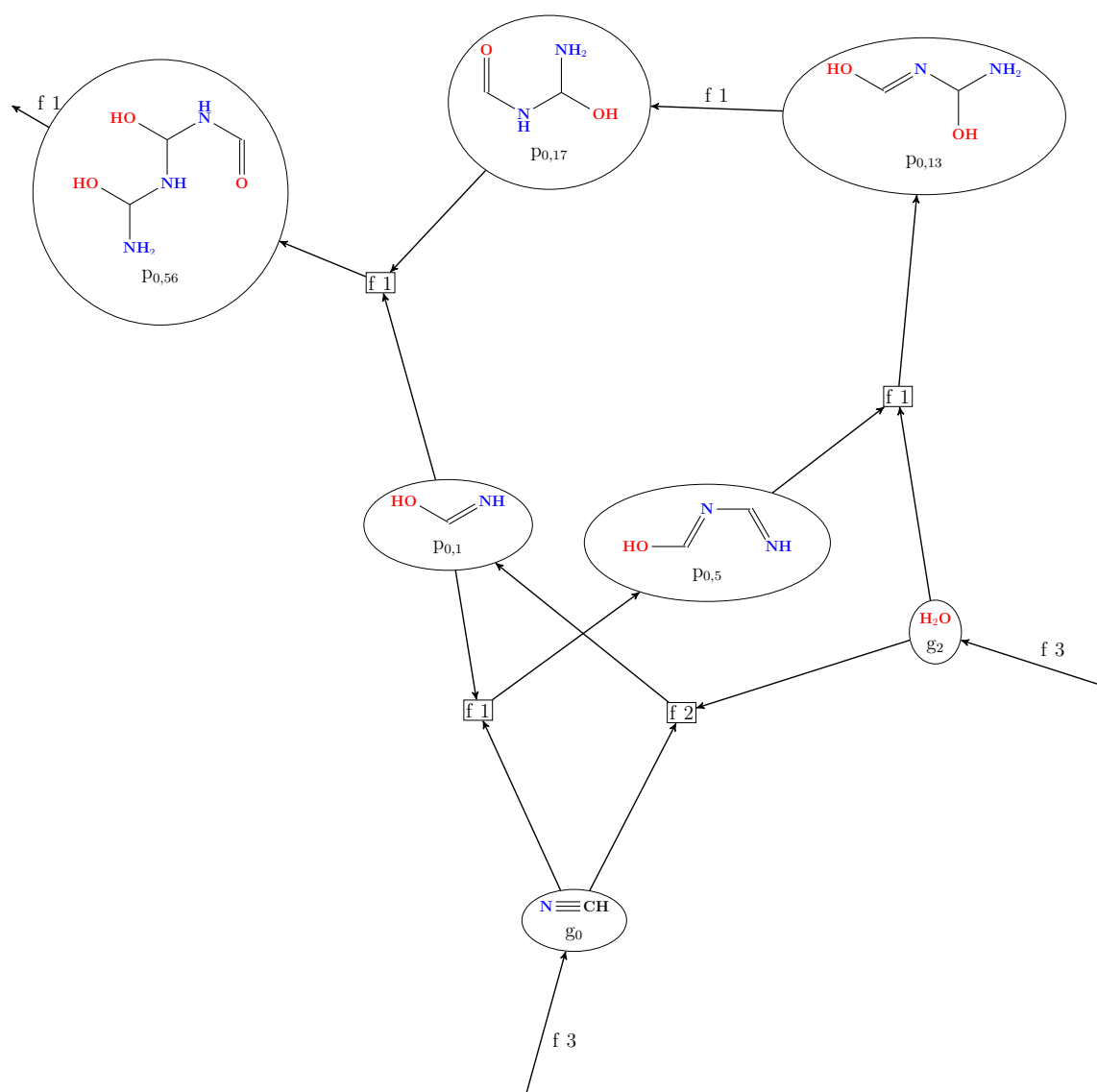
0.3.2 Solution 1

Overall Data

Objective value (non-integral): -0.0982654

Vertex/Graph	In	Out	G	logK	t_order
$g_{\{0\}}$	3	0	-5.507152	-3.000000	0
$g_{\{2\}}$	3	0	-5.068043	-3.000000	0
$p_{\{0,13\}}$	0	0	-21.240678	-6.000000	3
$p_{\{0,17\}}$	0	0	-21.248887	-3.000000	34
$p_{\{0,1\}}$	0	0	-10.610101	-3.000000	1
$p_{\{0,56\}}$	0	1	-31.869324	-6.000000	67
$p_{\{0,5\}}$	0	0	-16.158998	-3.000000	2

Filtered Graph



File: out/038_dg_0_11100_f_0_1_filt

Vertex	InFlow	OutFlow	$x_v^{\Delta G^0}$	x_v^K	$x_v^{\Delta G}$	t_v
g_0	3	0	-14459.025578	-3.0	-14469.002933	0
g_2	3	0	-13306.144961	-3.0	-13316.122316	0
$p_{0,1}$	0	0	-27856.817054	-3.0	-27866.79441	1
$p_{0,5}$	0	0	-42425.44262	-3.0	-42435.419975	2
$p_{0,13}$	0	0	-55767.391129	-6.0	-55787.345839	3
$p_{0,17}$	0	0	-55788.944315	-3.0	-55798.92167	34
$p_{0,56}$	0	1	-83672.898792	-6.0	-83692.853502	67

Hyperedge	Source	Target	Flow	$x_e^{\Delta G}$	$\bar{x}_e^{\Delta G}$
6	$g_0, g_2,$	$p_{0,1},$	2	-82.342632	-82.342632
14	$g_0, p_{0,1},$	$p_{0,5},$	1	-100.296105	-100.296105
123	$g_2, p_{0,5},$	$p_{0,13},$	1	-35.803547	-35.803547
196	$p_{0,1}, p_{0,17},$	$p_{0,56},$	1	-27.137423	-27.137423
250	$p_{0,13},$	$p_{0,17},$	1	-12.249302	-12.249302
Sum					-257.9957830118342

$$\Delta G = -34.01716346808946$$

$$\Delta E = -0.09826540409006958$$

$$|E| = 6$$

$$|U| = 5$$

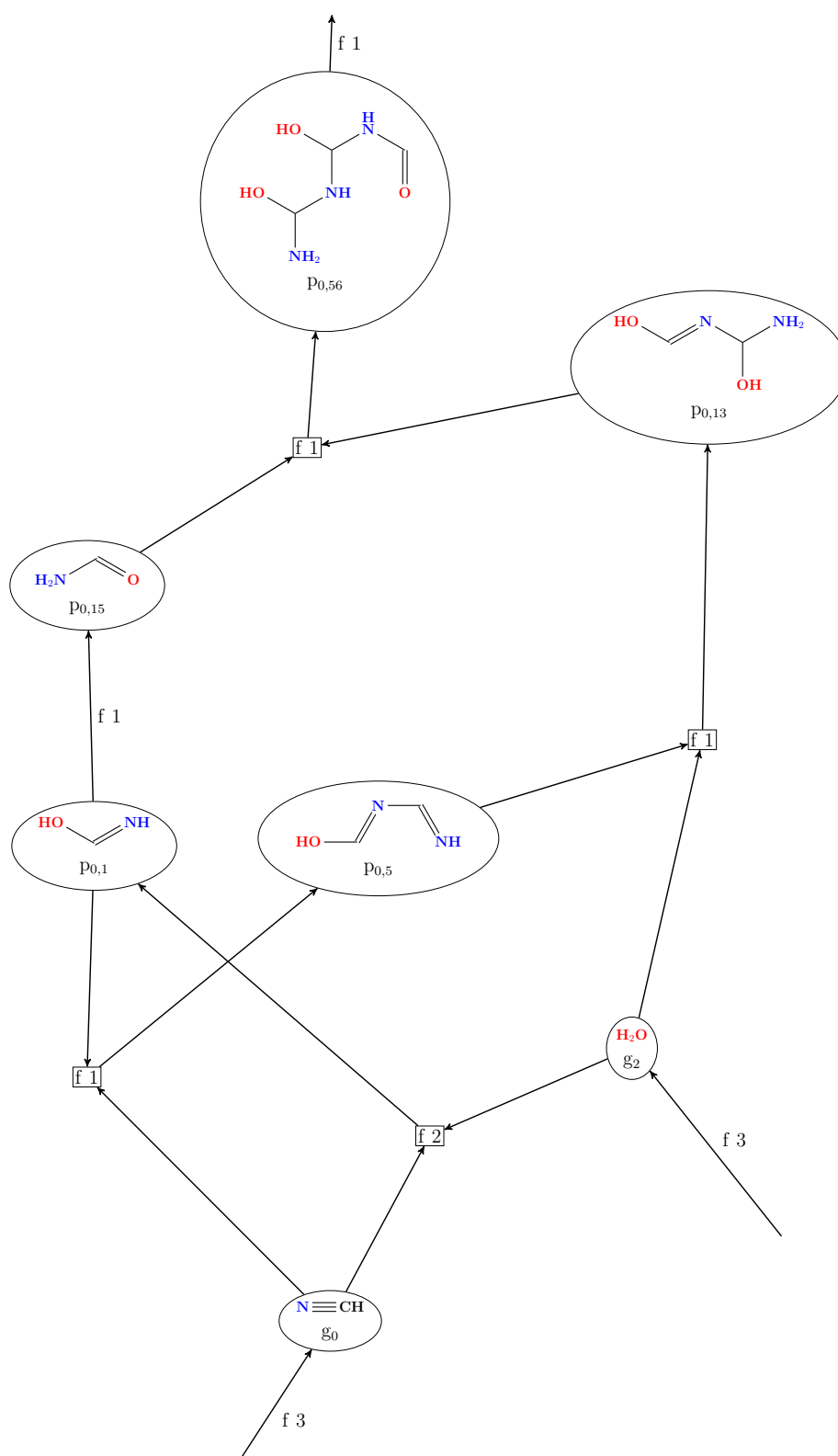
0.3.3 Solution 2

Overall Data

Objective value (non-integral): -0.0982654

Vertex/Graph	In	Out	G	logK	t_order
$g_{\{0\}}$	3	0	-5.507152	-6.000000	0
$g_{\{2\}}$	3	0	-5.068043	-6.000000	0
$p_{\{0,13\}}$	0	0	-21.240678	-3.000000	3
$p_{\{0,15\}}$	0	0	-10.625195	-3.000000	2
$p_{\{0,1\}}$	0	0	-10.610101	-3.000000	1
$p_{\{0,56\}}$	0	1	-31.869324	-3.076053	67
$p_{\{0,5\}}$	0	0	-16.158998	-6.000000	2

Filtered Graph



File: out/049_dg_0_11100_f_0_2_filt

Vertex	InFlow	OutFlow	$x_v^{\Delta G^0}$	x_v^K	$x_v^{\Delta G}$	t_v
g_0	3	0	-14459.025578	-6.0	-14478.980288	0
g_2	3	0	-13306.144961	-6.0	-13326.099672	0
$p_{0,1}$	0	0	-27856.817054	-3.0	-27866.79441	1
$p_{0,5}$	0	0	-42425.44262	-6.0	-42445.397331	2
$p_{0,13}$	0	0	-55767.391129	-3.0	-55777.368484	3
$p_{0,15}$	0	0	-27896.445756	-3.0	-27906.423111	2
$p_{0,56}$	0	1	-83672.898792	-3.076053	-83683.129084	67

Hyperedge	Source	Target	Flow	$x_e^{\Delta G}$	$\bar{x}_e^{\Delta G}$
6	$g_0, g_2,$	$p_{0,1},$	2	-63.734865	-63.734865
14	$g_0, p_{0,1},$	$p_{0,5},$	1	-100.296105	-100.296105
36	$p_{0,1},$	$p_{0,15},$	1	-39.628701	-39.628701
123	$g_2, p_{0,5},$	$p_{0,13},$	1	-7.891896	-7.891896
169	$p_{0,13}, p_{0,15},$	$p_{0,56},$	1	0.006113	0.006113
Sum					-257.99578301183413

$$\Delta G = -27.528031069143477$$

$$\Delta E = -0.09826540409006956$$

$$|E| = 6$$

$$|U| = 5$$

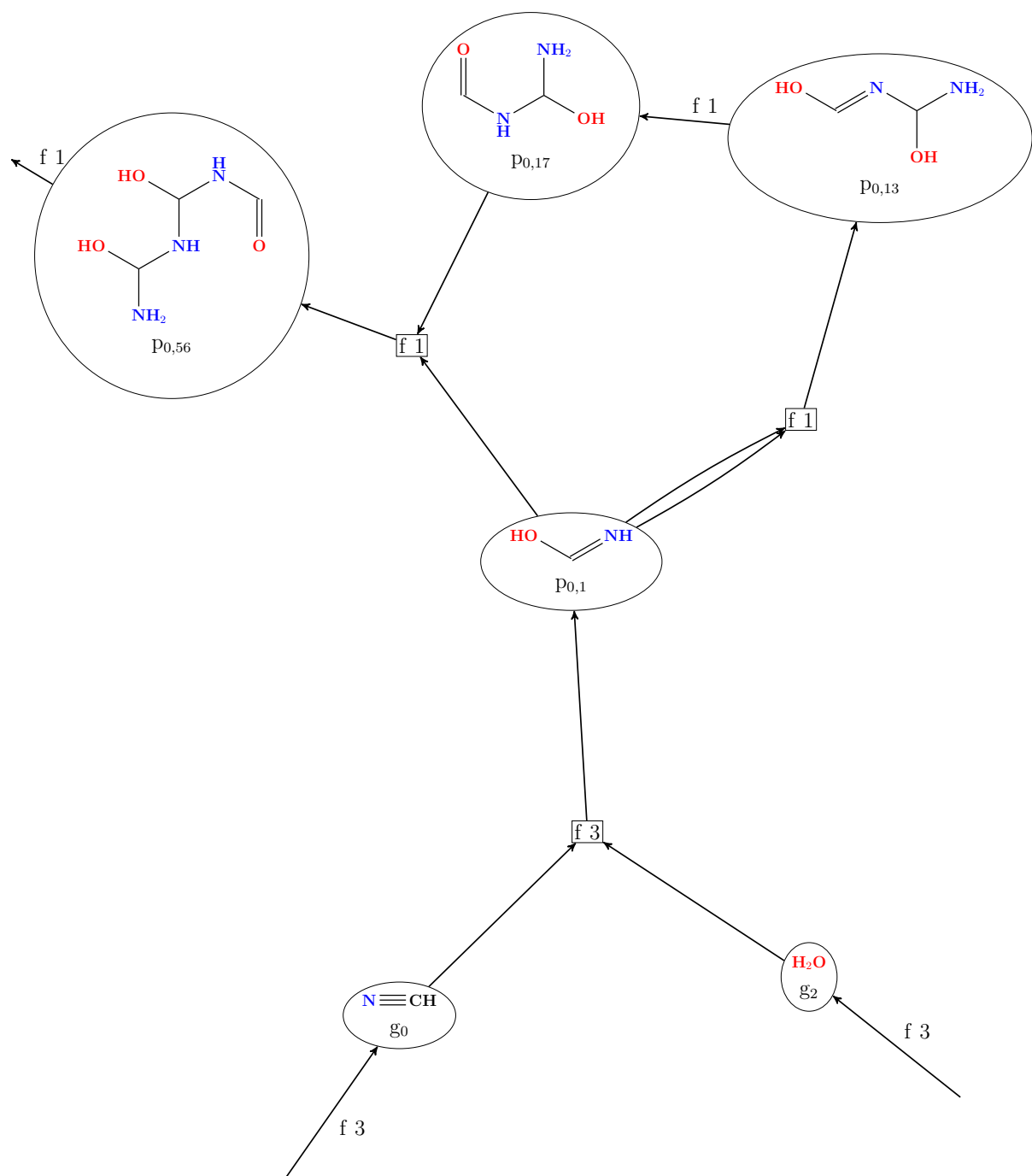
0.3.4 Solution 3

Overall Data

Objective value (non-integral): -0.0669028

Vertex/Graph	In	Out	G	logK	t_order
$g_{\{0\}}$	3	0	-5.507152	-3.000000	0
$g_{\{2\}}$	3	0	-5.068043	-6.000000	0
$p_{\{0,13\}}$	0	0	-21.240635	-3.000000	64
$p_{\{0,17\}}$	0	0	-21.248844	-6.000000	65
$p_{\{0,1\}}$	0	0	-10.610080	-3.000000	1
$p_{\{0,56\}}$	0	1	-31.869324	-6.000000	67

Filtered Graph



File: out/058_dg_0_11100_f_0_3_filt

Vertex	InFlow	OutFlow	$x_v^{\Delta G^0}$	x_v^K	$x_v^{\Delta G}$	t_v
g_0	3	0	-14459.025578	-3.0	-14469.002933	0
g_2	3	0	-13306.144961	-6.0	-13326.099672	0
$p_{0,1}$	0	0	-27856.761341	-3.0	-27866.738696	1
$p_{0,13}$	0	0	-55767.279594	-3.0	-55777.256949	64
$p_{0,17}$	0	0	-55788.832737	-6.0	-55808.787447	65
$p_{0,56}$	0	1	-83672.898792	-6.0	-83692.853502	67

Hyperedge	Source	Target	Flow	$x_e^{\Delta G}$	$\bar{x}_e^{\Delta G}$
6	$g_0, g_2,$	$p_{0,1},$	3	-72.983035	-72.983035
30	$p_{0,1}, p_{0,1},$	$p_{0,13},$	1	-44.453029	-44.453029
196	$p_{0,1}, p_{0,17},$	$p_{0,56},$	1	-18.00083	-18.00083
250	$p_{0,13},$	$p_{0,17},$	1	-30.857027	-30.857027
Sum					-175.65333443433107

$$\Delta G = -31.225997951957837$$

$$\Delta E = -0.06690282176885788$$

$$|E| = 6$$

$$|U| = 4$$

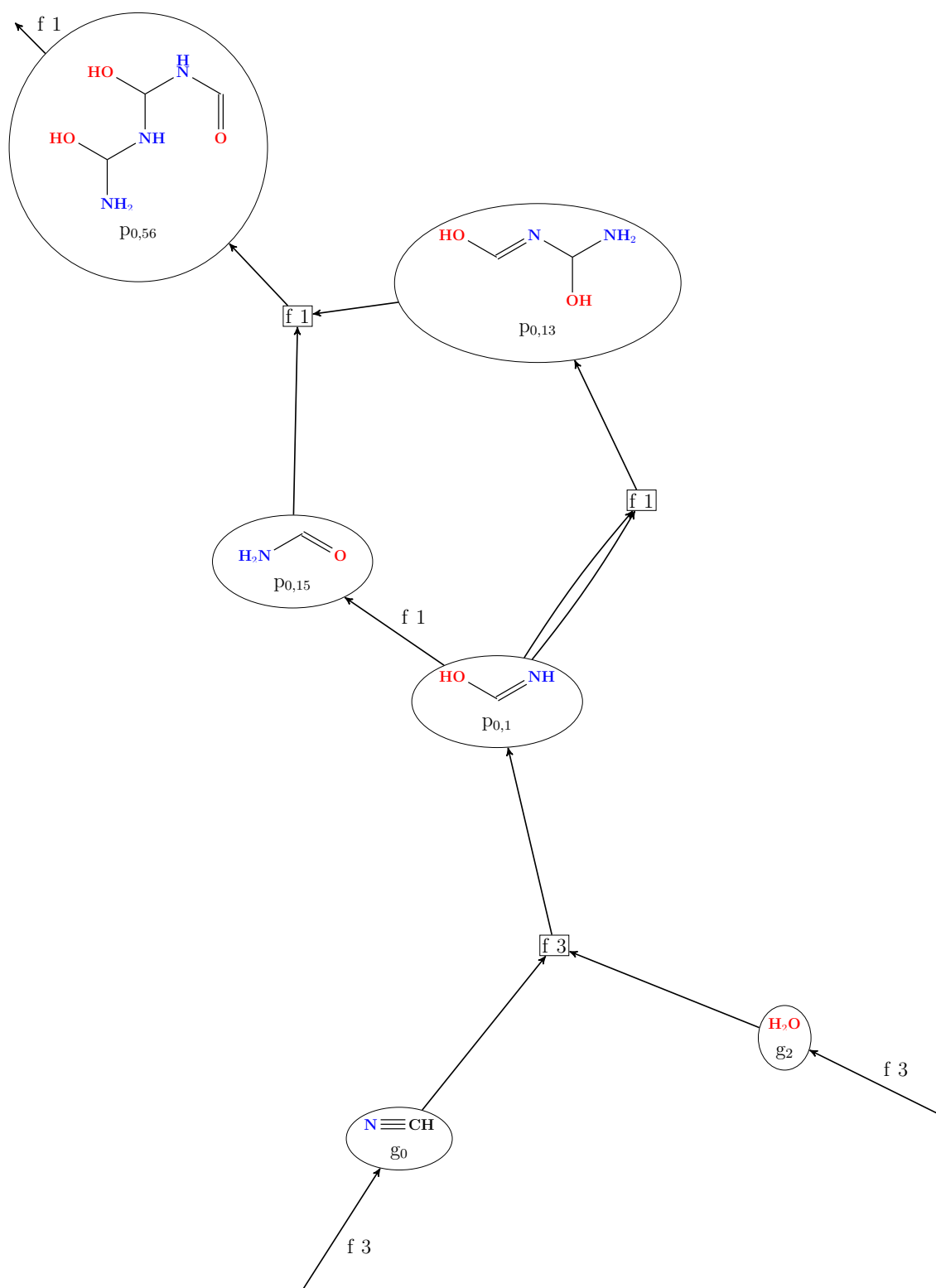
0.3.5 Solution 4

Overall Data

Objective value (non-integral): -0.0669028

Vertex/Graph	In	Out	G	logK	t_order
$g_{\{0\}}$	3	0	-5.507152	-3.000000	0
$g_{\{2\}}$	3	0	-5.068043	-3.000000	0
$p_{\{0,13\}}$	0	0	-21.240678	-3.000000	3
$p_{\{0,15\}}$	0	0	-10.625195	-5.923947	2
$p_{\{0,1\}}$	0	0	-10.610101	-3.000000	1
$p_{\{0,56\}}$	0	1	-31.869324	-6.000000	67

Filtered Graph



File: out/067_dg_0_11100_f_0_4_filt

Vertex	InFlow	OutFlow	$x_v^{\Delta G^0}$	x_v^K	$x_v^{\Delta G}$	t_v
g_0	3	0	-14459.025578	-3.0	-14469.002933	0
g_2	3	0	-13306.144961	-3.0	-13316.122316	0
$p_{0,1}$	0	0	-27856.817054	-3.0	-27866.79441	1
$p_{0,13}$	0	0	-55767.391129	-3.0	-55777.368484	3
$p_{0,15}$	0	0	-27896.445756	-5.923947	-27916.147529	2
$p_{0,56}$	0	1	-83672.898792	-6.0	-83692.853502	67

Hyperedge	Source	Target	Flow	$x_e^{\Delta G}$	$\bar{x}_e^{\Delta G}$
6	$g_0, g_2,$	$p_{0,1},$	3	-82.342632	-82.342632
30	$p_{0,1}, p_{0,1},$	$p_{0,13},$	1	-44.453136	-44.453136
36	$p_{0,1},$	$p_{0,15},$	1	-48.696722	-48.696722
169	$p_{0,13}, p_{0,15},$	$p_{0,56},$	1	0.006113	0.006113
Sum					-175.65333443433107

$$\Delta G = -34.01716373063942$$

$$\Delta E = -0.06690282176885788$$

$$|E| = 6$$

$$|U| = 4$$

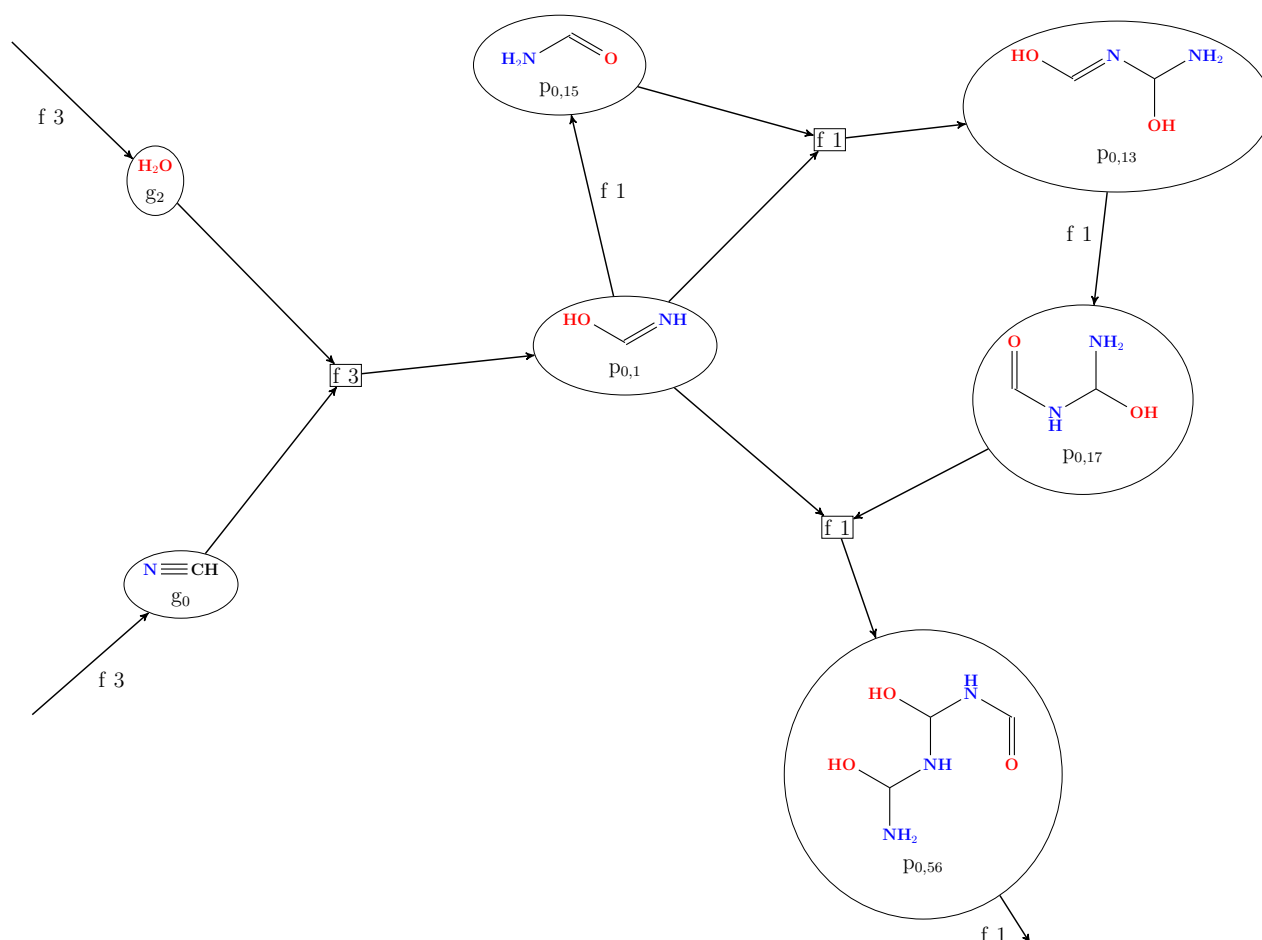
0.3.6 Solution 5

Overall Data

Objective value (non-integral): -0.0669028

Vertex/Graph	In	Out	G	logK	t_order
$g_{\{0\}}$	3	0	-5.507152	-3.000000	0
$g_{\{2\}}$	3	0	-5.068043	-6.000000	0
$p_{\{0,13\}}$	0	0	-21.240635	-3.000000	44
$p_{\{0,15\}}$	0	0	-10.625174	-4.557582	22
$p_{\{0,17\}}$	0	0	-21.248844	-6.000000	45
$p_{\{0,1\}}$	0	0	-10.610080	-3.000000	21
$p_{\{0,56\}}$	0	1	-31.869324	-6.000000	67

Filtered Graph



File: out/076_dg_0_11100_f_0_5_filt

Vertex	InFlow	OutFlow	$x_v^{\Delta G^0}$	x_v^K	$x_v^{\Delta G}$	t_v
g_0	3	0	-14459.025578	-3.0	-14469.002933	0
g_2	3	0	-13306.144961	-6.0	-13326.099672	0
$p_{0,1}$	0	0	-27856.761341	-3.0	-27866.738696	21
$p_{0,13}$	0	0	-55767.279594	-3.0	-55777.256949	44
$p_{0,15}$	0	0	-27896.389963	-4.557582	-27911.5475	22
$p_{0,17}$	0	0	-55788.832737	-6.0	-55808.787447	45
$p_{0,56}$	0	1	-83672.898792	-6.0	-83692.853502	67

Hyperedge	Source	Target	Flow	$x_e^{\Delta G}$	$\bar{x}_e^{\Delta G}$
6	g_0, g_2	$p_{0,1}$	3	-72.983035	-72.983035
36	$p_{0,1}$	$p_{0,15}$	1	-44.459142	-44.459142
192	$p_{0,1}, p_{0,15}$	$p_{0,13}$	1	0.006113	0.006113
196	$p_{0,1}, p_{0,17}$	$p_{0,56}$	1	-18.00083	-18.00083
250	$p_{0,13}$	$p_{0,17}$	1	-30.857027	-30.857027
Sum					-175.65333443433028

$$\Delta G = -31.225997951957837$$

$$\Delta E = -0.06690282176885758$$

$$|E| = 7$$

$$|U| = 5$$

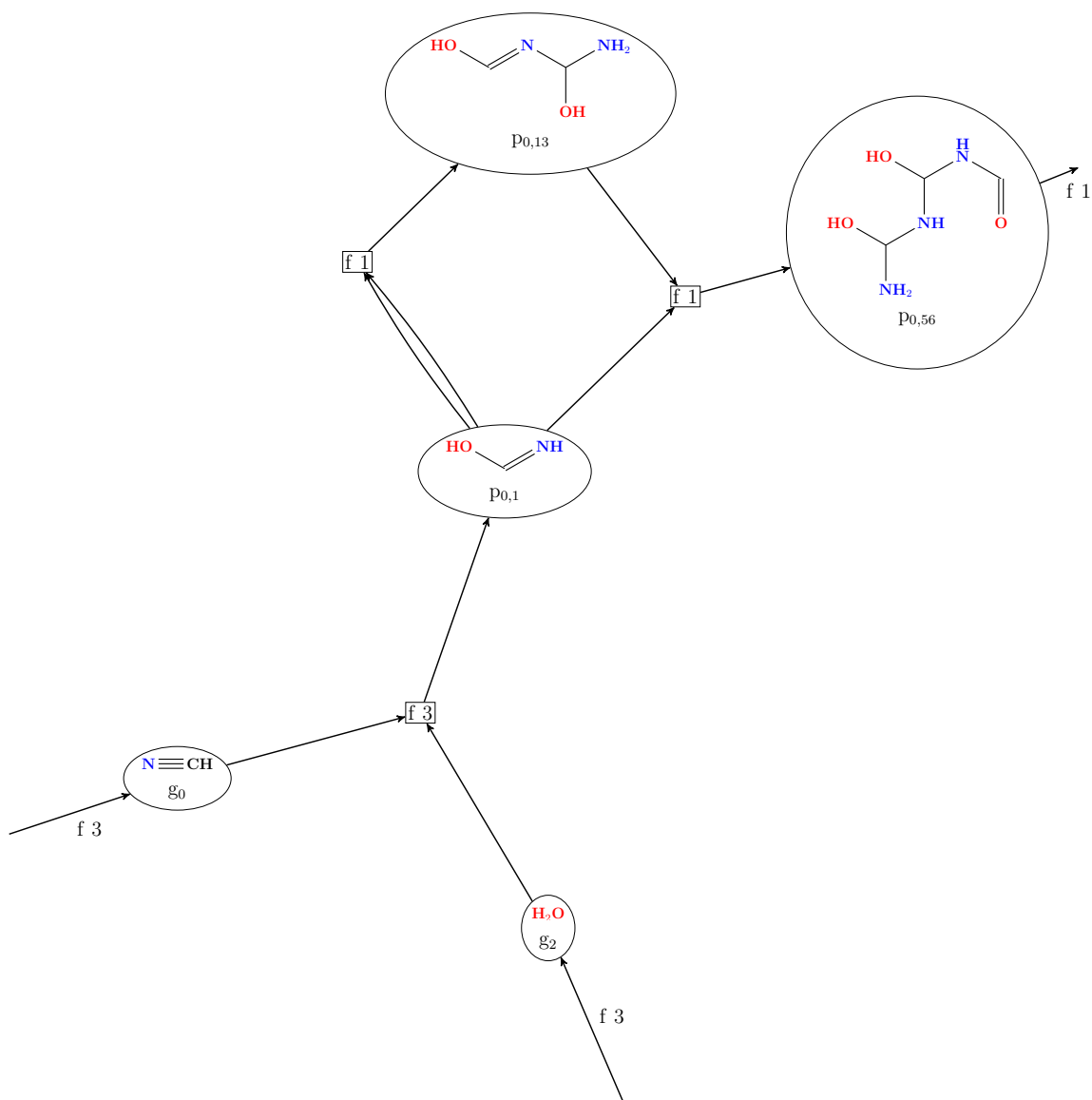
0.3.7 Solution 6

Overall Data

Objective value (non-integral): -0.0669028

Vertex/Graph	In	Out	G	logK	t_order
$g_{\{0\}}$	3	0	-5.507152	-3.000000	0
$g_{\{2\}}$	3	0	-5.068043	-6.000000	0
$p_{\{0,13\}}$	0	0	-21.240635	-3.000000	45
$p_{\{0,1\}}$	0	0	-10.610080	-3.000000	21
$p_{\{0,56\}}$	0	1	-31.869324	-6.000000	67

Filtered Graph



File: out/085_dg_0_11100_f_0_6_filt

Vertex	InFlow	OutFlow	$x_v^{\Delta G^0}$	x_v^K	$x_v^{\Delta G}$	t_v
g_0	3	0	-14459.025578	-3.0	-14469.002933	0
g_2	3	0	-13306.144961	-6.0	-13326.099672	0
$p_{0,1}$	0	0	-27856.761341	-3.0	-27866.738696	21
$p_{0,13}$	0	0	-55767.279594	-3.0	-55777.256949	45
$p_{0,56}$	0	1	-83672.898792	-6.0	-83692.853502	67

Hyperedge	Source	Target	Flow	$x_e^{\Delta G}$	$\bar{x}_e^{\Delta G}$
6	$g_0, g_2,$	$p_{0,1},$	3	-72.983035	-72.983035
30	$p_{0,1}, p_{0,1},$	$p_{0,13},$	1	-44.453029	-44.453029
263	$p_{0,1}, p_{0,13},$	$p_{0,56},$	1	-48.857857	-48.857857
Sum					-175.65333443433022

$$\Delta G = -31.225997951957837$$

$$\Delta E = -0.06690282176885756$$

$$|E| = 5$$

$$|U| = 3$$

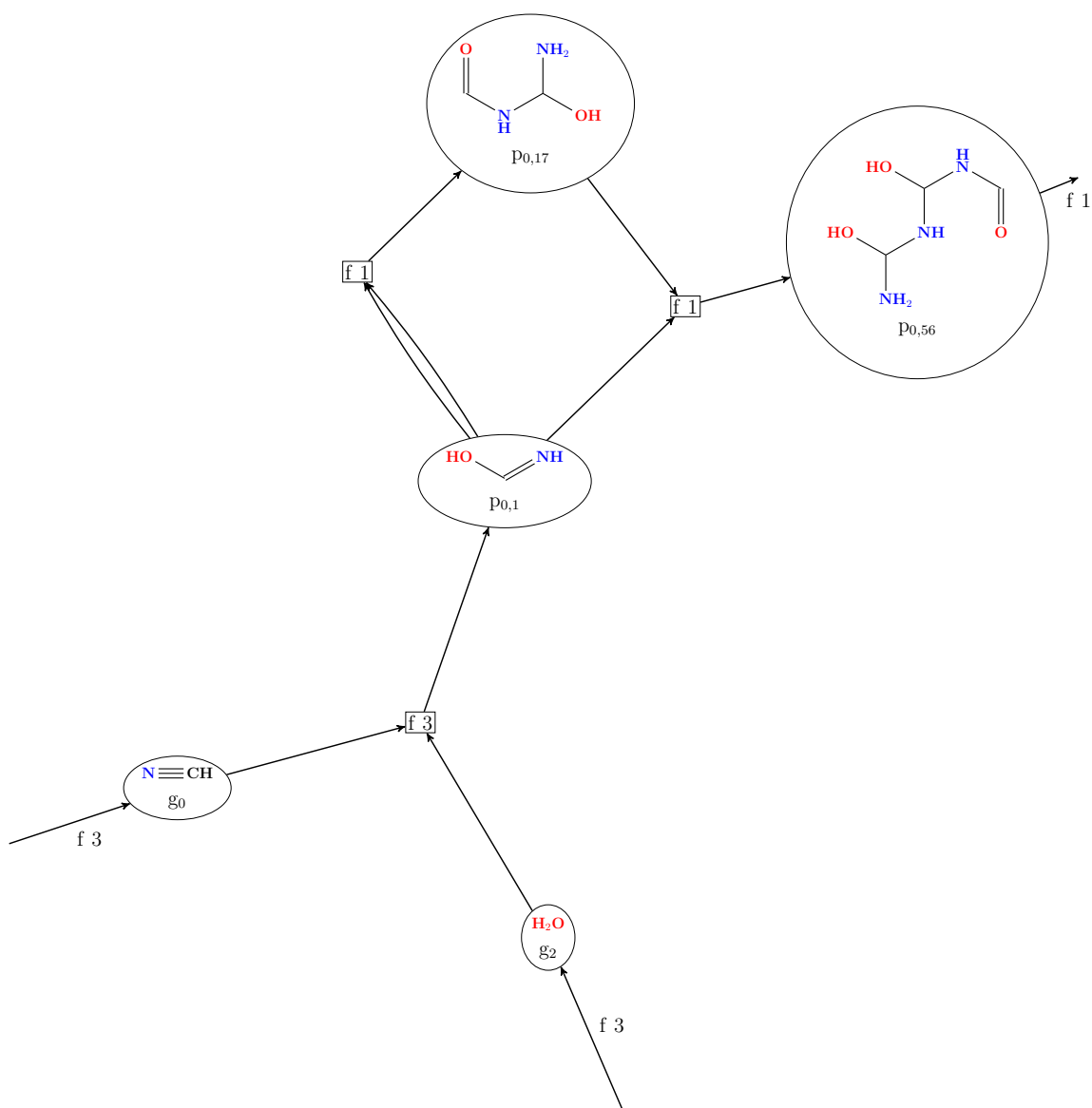
0.3.8 Solution 7

Overall Data

Objective value (non-integral): -0.0669028

Vertex/Graph	In	Out	G	logK	t_order
$g_{\{0\}}$	3	0	-5.507152	-6.000000	0
$g_{\{2\}}$	3	0	-5.068043	-6.000000	0
$p_{\{0,17\}}$	0	0	-21.248844	-3.000000	45
$p_{\{0,1\}}$	0	0	-10.610080	-3.000000	21
$p_{\{0,56\}}$	0	1	-31.869324	-6.000000	67

Filtered Graph



File: out/094_dg_0_11100_f_0_7_filt

Vertex	InFlow	OutFlow	$x_v^{\Delta G^0}$	x_v^K	$x_v^{\Delta G}$	t_v
g_0	3	0	-14459.025578	-6.0	-14478.980288	0
g_2	3	0	-13306.144961	-6.0	-13326.099672	0
$p_{0,1}$	0	0	-27856.761341	-3.0	-27866.738696	21
$p_{0,17}$	0	0	-55788.832737	-3.0	-55798.810092	45
$p_{0,56}$	0	1	-83672.898792	-6.0	-83692.853502	67

Hyperedge	Source	Target	Flow	$x_e^{\Delta G}$	$\bar{x}_e^{\Delta G}$
6	$g_0, g_2,$	$p_{0,1},$	3	-63.679151	-63.679151
40	$p_{0,1}, p_{0,1},$	$p_{0,17},$	1	-66.006172	-66.006172
196	$p_{0,1}, p_{0,17},$	$p_{0,56},$	1	-27.304714	-27.304714
Sum					-175.65333443433022

$$\Delta G = -28.434833223476108$$

$$\Delta E = -0.06690282176885756$$

$$|E| = 5$$

$$|U| = 3$$

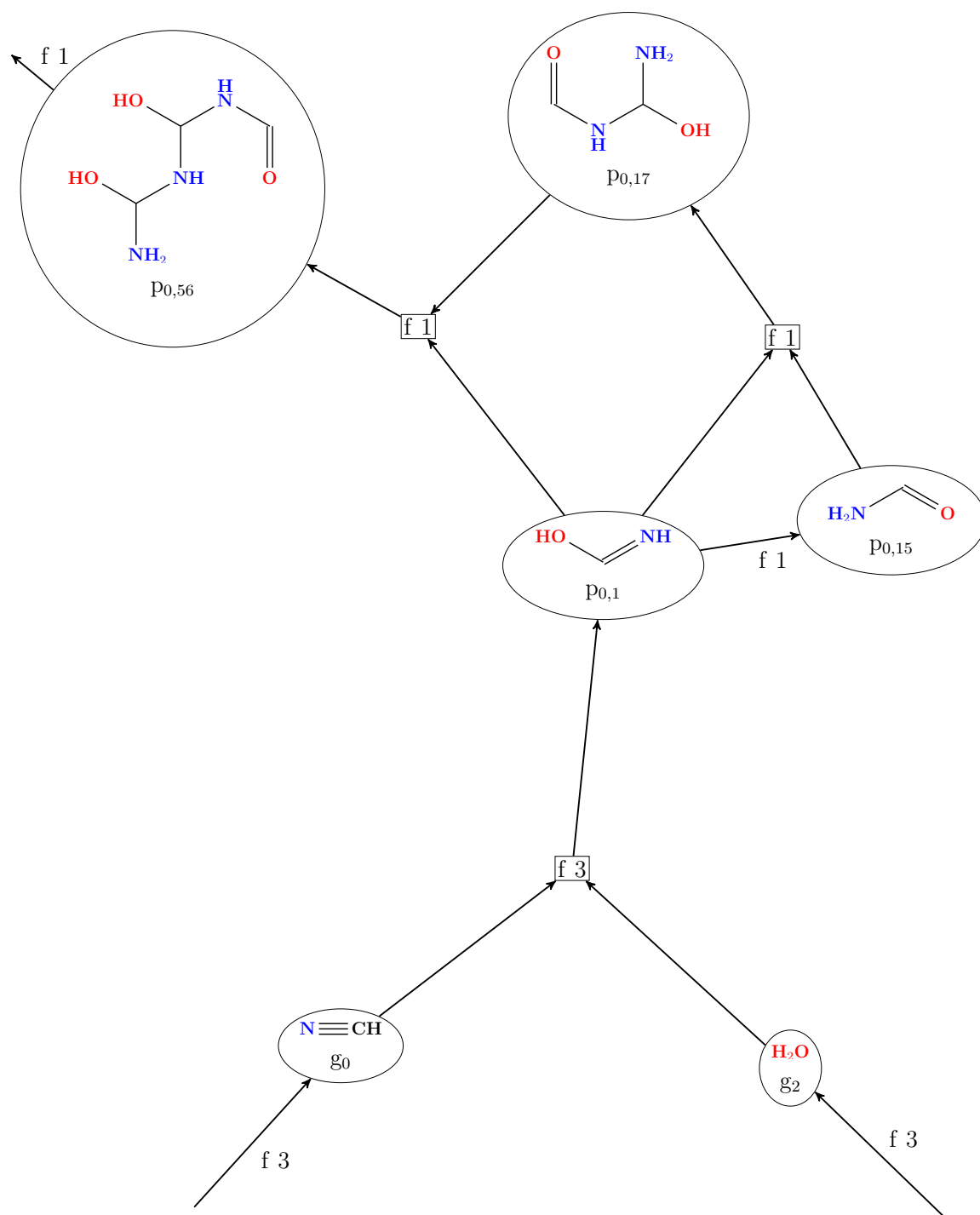
0.3.9 Solution 8

Overall Data

Objective value (non-integral): -0.0669028

Vertex/Graph	In	Out	G	logK	t_order
$g_{\{0\}}$	3	0	-5.507152	-6.000000	0
$g_{\{2\}}$	3	0	-5.068043	-6.000000	0
$p_{\{0,15\}}$	0	0	-10.625195	-6.000000	2
$p_{\{0,17\}}$	0	0	-21.248844	-3.000000	4
$p_{\{0,1\}}$	0	0	-10.610080	-3.000000	1
$p_{\{0,56\}}$	0	1	-31.869324	-6.000000	67

Filtered Graph



File: out/103_dg_0_11100_f_0_8_filt

Vertex	InFlow	OutFlow	$x_v^{\Delta G^0}$	x_v^K	$x_v^{\Delta G}$	t_v
g_0	3	0	-14459.025578	-6.0	-14478.980288	0
g_2	3	0	-13306.144961	-6.0	-13326.099672	0
$p_{0,1}$	0	0	-27856.761341	-3.0	-27866.738696	1
$p_{0,15}$	0	0	-27896.445756	-6.0	-27916.400466	2
$p_{0,17}$	0	0	-55788.832737	-3.0	-55798.810092	4
$p_{0,56}$	0	1	-83672.898792	-6.0	-83692.853502	67

Hyperedge	Source	Target	Flow	$x_e^{\Delta G}$	$\bar{x}_e^{\Delta G}$
6	$g_0, g_2,$	$p_{0,1},$	3	-63.679151	-63.679151
36	$p_{0,1},$	$p_{0,15},$	1	-48.988299	-48.988299
183	$p_{0,1}, p_{0,15},$	$p_{0,17},$	1	-17.017873	-17.017873
196	$p_{0,1}, p_{0,17},$	$p_{0,56},$	1	-27.304714	-27.304714
Sum					-175.653334434311

$$\Delta G = -28.434832960926144$$

$$\Delta E = -0.0669028217688579$$

$$|E| = 6$$

$$|U| = 4$$

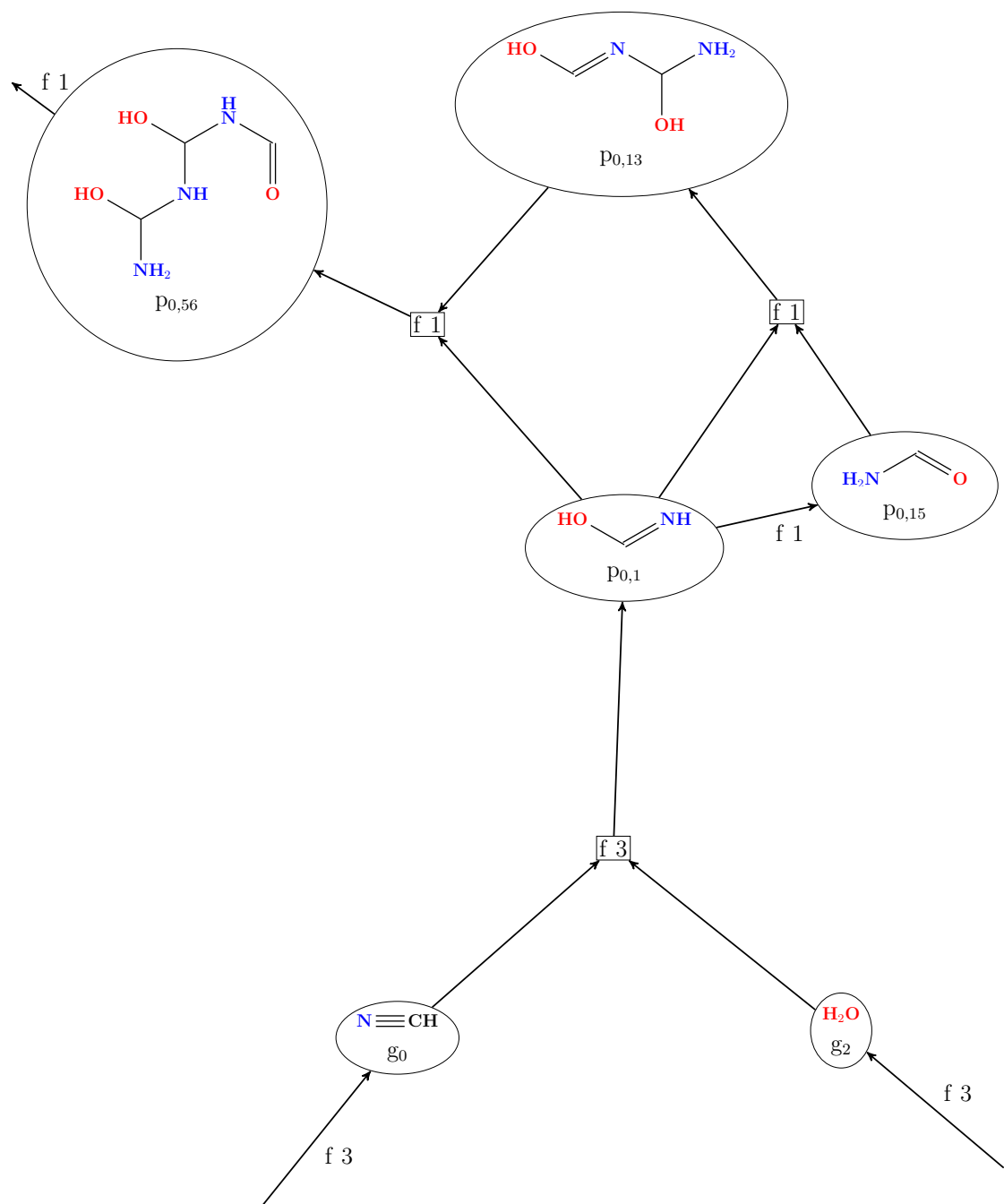
0.3.10 Solution 9

Overall Data

Objective value (non-integral): -0.0669028

Vertex/Graph	In	Out	G	logK	t_order
$g_{\{0\}}$	3	0	-5.507152	-3.000000	0
$g_{\{2\}}$	3	0	-5.068043	-6.000000	0
$p_{\{0,13\}}$	0	0	-21.240678	-6.000000	65
$p_{\{0,15\}}$	0	0	-10.625174	-4.575581	63
$p_{\{0,1\}}$	0	0	-10.610101	-6.000000	1
$p_{\{0,56\}}$	0	1	-31.869260	-3.000000	67

Filtered Graph



File: out/112_dg_0_11100_f_0_9_filt

Vertex	InFlow	OutFlow	$x_v^{\Delta G^0}$	x_v^K	$x_v^{\Delta G}$	t_v
g_0	3	0	-14459.025578	-3.0	-14469.002933	0
g_2	3	0	-13306.144961	-6.0	-13326.099672	0
$p_{0,1}$	0	0	-27856.817054	-6.0	-27876.771765	1
$p_{0,13}$	0	0	-55767.391129	-6.0	-55787.345839	65
$p_{0,15}$	0	0	-27896.389963	-4.575581	-27911.607362	63
$p_{0,56}$	0	1	-83672.731446	-3.0	-83682.708802	67

Hyperedge	Source	Target	Flow	$x_e^{\Delta G}$	$\bar{x}_e^{\Delta G}$
6	$g_0, g_2,$	$p_{0,1},$	3	-82.342632	-82.342632
36	$p_{0,1},$	$p_{0,15},$	1	-35.155366	-35.155366
192	$p_{0,1}, p_{0,15},$	$p_{0,13},$	1	0.006113	0.006113
263	$p_{0,1}, p_{0,13},$	$p_{0,56},$	1	-20.611612	-20.611612
Sum				-175.65333443432942	

$$\Delta G = -30.27887573711175$$

$$\Delta E = -0.06690282176885726$$

$$|E| = 6$$

$$|U| = 4$$

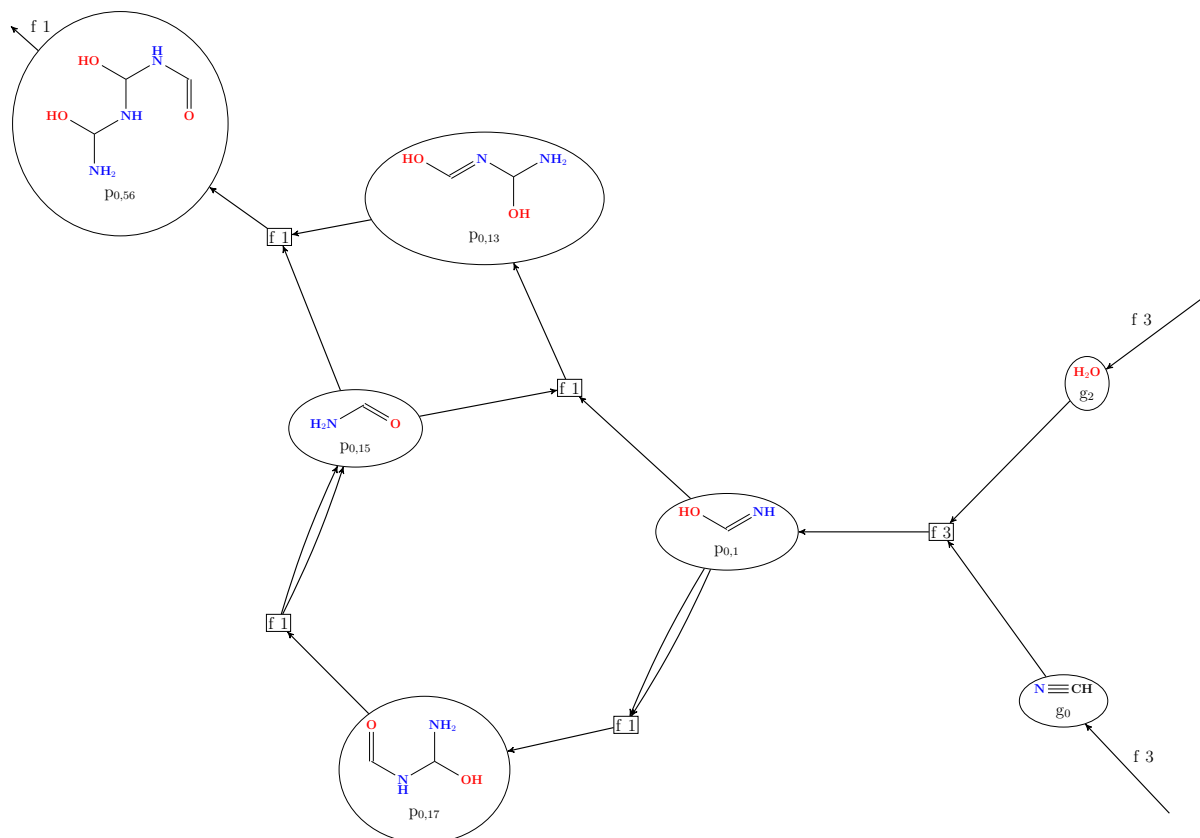
0.3.11 Solution 10

Overall Data

Objective value (non-integral): -0.0669028

Vertex/Graph	In	Out	G	logK	t_order
$g_{\{0\}}$	3	0	-5.507152	-3.000000	0
$g_{\{2\}}$	3	0	-5.068043	-3.000000	0
$p_{\{0,13\}}$	0	0	-21.240635	-3.000000	6
$p_{\{0,15\}}$	0	0	-10.625174	-4.539617	4
$p_{\{0,17\}}$	0	0	-21.248887	-6.000000	3
$p_{\{0,1\}}$	0	0	-10.610101	-3.000000	1
$p_{\{0,56\}}$	0	1	-31.869324	-6.000000	67

Filtered Graph



Vertex	InFlow	OutFlow	$x_v^{\Delta G^0}$	x_v^K	$x_v^{\Delta G}$	t_v
g_0	3	0	-14459.025578	-3.0	-14469.002933	0
g_2	3	0	-13306.144961	-3.0	-13316.122316	0
$p_{0,1}$	0	0	-27856.817054	-3.0	-27866.79441	1
$p_{0,13}$	0	0	-55767.279594	-3.0	-55777.256949	6
$p_{0,15}$	0	0	-27896.389963	-4.539617	-27911.487754	4
$p_{0,17}$	0	0	-55788.944315	-6.0	-55808.899025	3
$p_{0,56}$	0	1	-83672.898792	-6.0	-83692.853502	67

Hyperedge	Source	Target	Flow	$x_e^{\Delta G}$	$\bar{x}_e^{\Delta G}$
6	$g_0, g_2,$	$p_{0,1},$	3	-82.342632	-82.342632
40	$p_{0,1}, p_{0,1},$	$p_{0,17},$	1	-75.310206	-75.310206
169	$p_{0,13}, p_{0,15},$	$p_{0,56},$	1	-4.454429	-4.454429
192	$p_{0,1}, p_{0,15},$	$p_{0,13},$	1	0.006113	0.006113
237	$p_{0,17},$	$p_{0,15}, p_{0,15},$	1	-13.385223	-13.385223
Sum					-175.6533344343286

$$\Delta G = -34.01716373063942$$

$$\Delta E = -0.06690282176885694$$

$$|E| = 7$$

$$|U| = 5$$

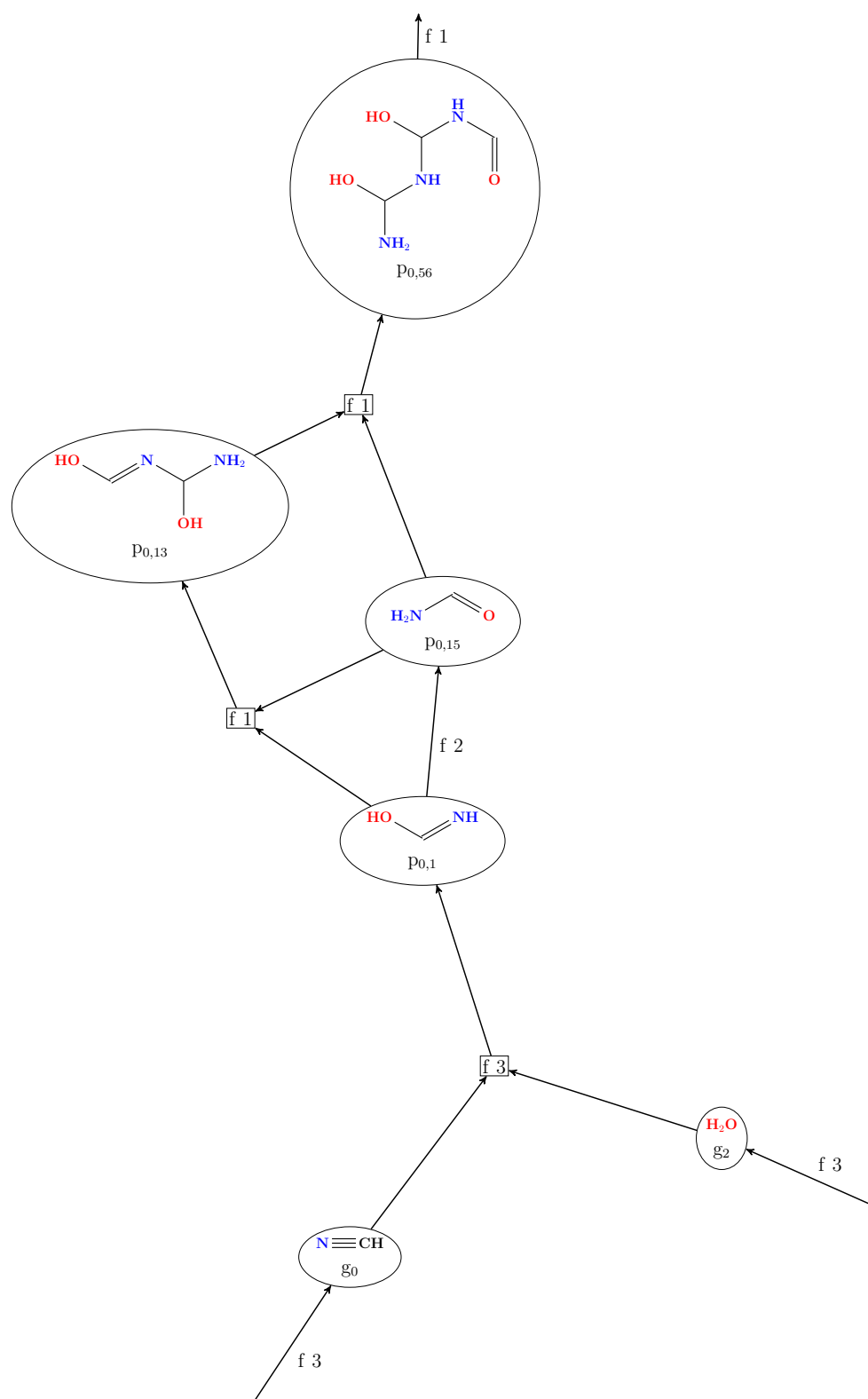
0.3.12 Solution 11

Overall Data

Objective value (non-integral): -0.0518091

Vertex/Graph	In	Out	G	logK	t_order
$g_{\{0\}}$	3	0	-5.507152	-6.000000	0
$g_{\{2\}}$	3	0	-5.068043	-6.000000	0
$p_{\{0,13\}}$	0	0	-21.240678	-5.939966	4
$p_{\{0,15\}}$	0	0	-10.625174	-3.000000	2
$p_{\{0,1\}}$	0	0	-10.610080	-3.000000	1
$p_{\{0,56\}}$	0	1	-31.869324	-6.000000	67

Filtered Graph



File: out/130_dg_0_11100_f_0_11_filt

Vertex	InFlow	OutFlow	$x_v^{\Delta G^0}$	x_v^K	$x_v^{\Delta G}$	t_v
g_0	3	0	-14459.025578	-6.0	-14478.980288	0
g_2	3	0	-13306.144961	-6.0	-13326.099672	0
$p_{0,1}$	0	0	-27856.761341	-3.0	-27866.738696	1
$p_{0,13}$	0	0	-55767.391129	-5.939966	-55787.146179	4
$p_{0,15}$	0	0	-27896.389963	-3.0	-27906.367318	2
$p_{0,56}$	0	1	-83672.898792	-6.0	-83692.853502	67

Hyperedge	Source	Target	Flow	$x_e^{\Delta G}$	$\bar{x}_e^{\Delta G}$
6	$g_0, g_2,$	$p_{0,1},$	3	-63.679151	-63.679151
36	$p_{0,1},$	$p_{0,15},$	2	-39.628622	-39.628622
169	$p_{0,13}, p_{0,15},$	$p_{0,56},$	1	0.0	0.0
192	$p_{0,1}, p_{0,15},$	$p_{0,13},$	1	-14.053642	-14.053642
Sum					-136.0247123305343

$$\Delta G = -28.434833223476108$$

$$\Delta E = -0.051809076750616134$$

$$|E| = 7$$

$$|U| = 4$$