

Summary

December 6, 2024

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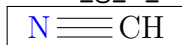
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0.1 Loaded Graphs

0.1.1 g_{0}

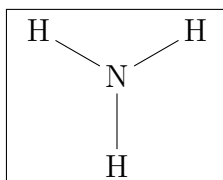


File: out/001_g_0_10300000



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0.1.2 g_{1}

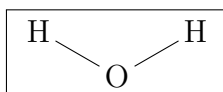


File: out/005_g_1_10300000



File: out/007_g_1_11310100

0.1.3 g_{2}



File: out/009_g_2_10300000



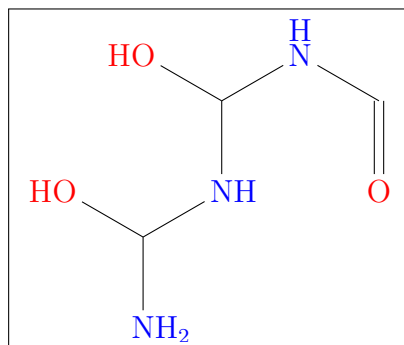
File: out/011_g_2_11310100

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

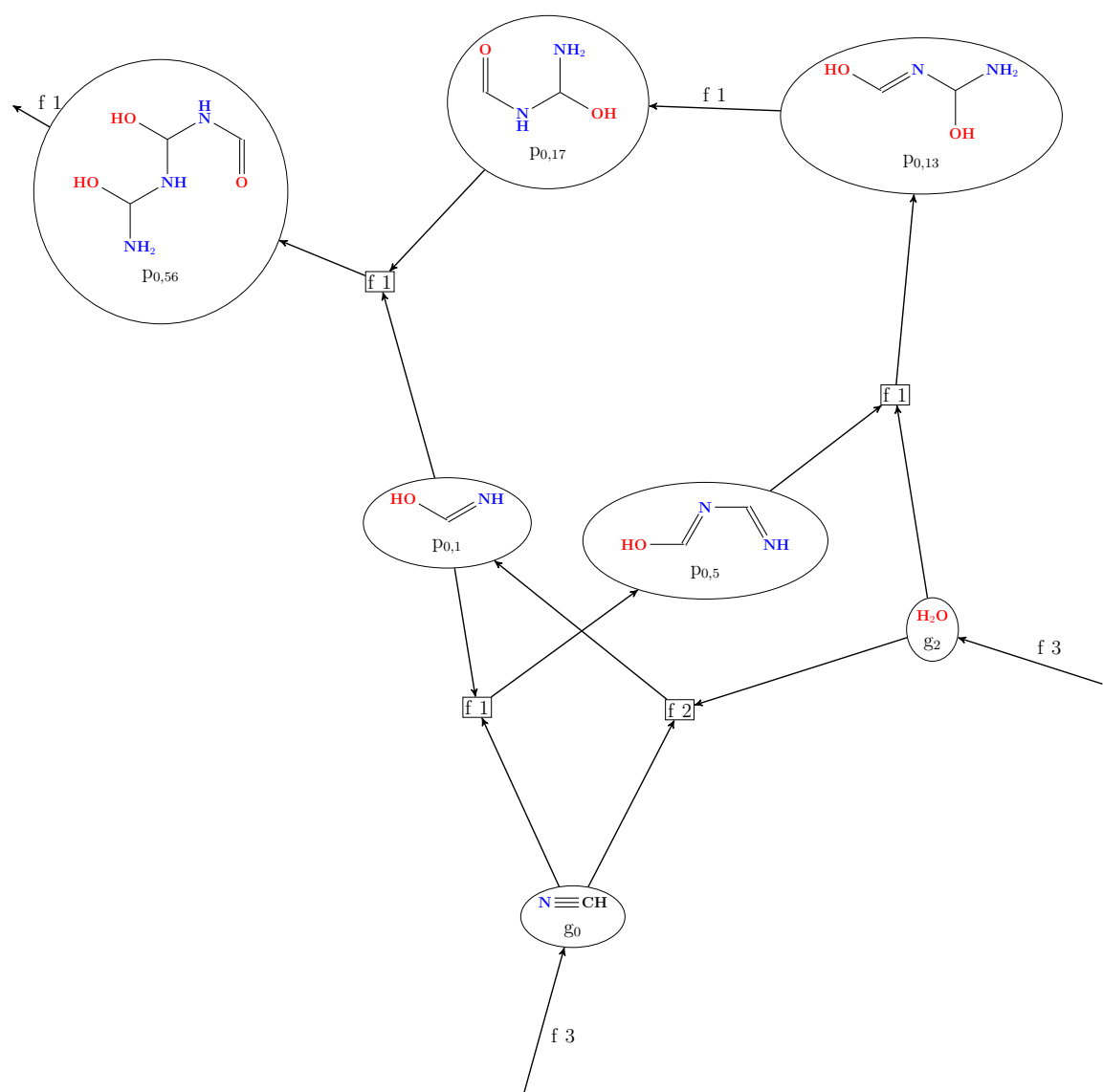
0.3.1 Solution 0

Overall Data

Objective value (non-integral): -0.113219

Vertex/Graph	In	Out	G	logK	t_order
g_{0}	3	0	-5.507152	1.000000	0
g_{2}	3	0	-5.068043	1.000000	0
p_{0,13}	0	0	-21.240678	0.000000	64
p_{0,17}	0	0	-21.248844	0.000000	65
p_{0,1}	0	0	-10.610080	1.000000	1
p_{0,56}	0	1	-31.869324	0.000000	67
p_{0,5}	0	0	-16.158998	0.000000	63

Filtered Graph



File: out/029_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	1.0	-14455.699793	0
g_2	3	0	-13306.144961	1.0	-13302.819176	0
$p_{0,1}$	0	0	-27856.761341	1.0	-27853.435556	1
$p_{0,5}$	0	0	-42425.44262	0.0	-42425.44262	63
$p_{0,13}$	0	0	-55767.391129	0.0	-55767.391129	64
$p_{0,17}$	0	0	-55788.832737	0.0	-55788.832737	65
$p_{0,56}$	0	1	-83672.898792	0.0	-83672.898792	67

Hyperedge	Source	Target	Flow	$x_e^{\Delta G}$	$\bar{x}_e^{\Delta G}$
6	$g_0, g_2,$	$p_{0,1},$	2	-93.86065	-93.86065
14	$g_0, p_{0,1},$	$p_{0,5},$	1	-114.195398	-114.195398
123	$g_2, p_{0,5},$	$p_{0,13},$	1	-38.073396	-38.073396
196	$p_{0,1}, p_{0,17},$	$p_{0,56},$	1	-29.574562	-29.574562
250	$p_{0,13},$	$p_{0,17},$	1	-21.441608	-21.441608
Sum					-297.25667549475185

$$\Delta G = -39.10062567680478$$

$$\Delta E = -0.11321908829270522$$

$$|E| = 6$$

$$|U| = 5$$

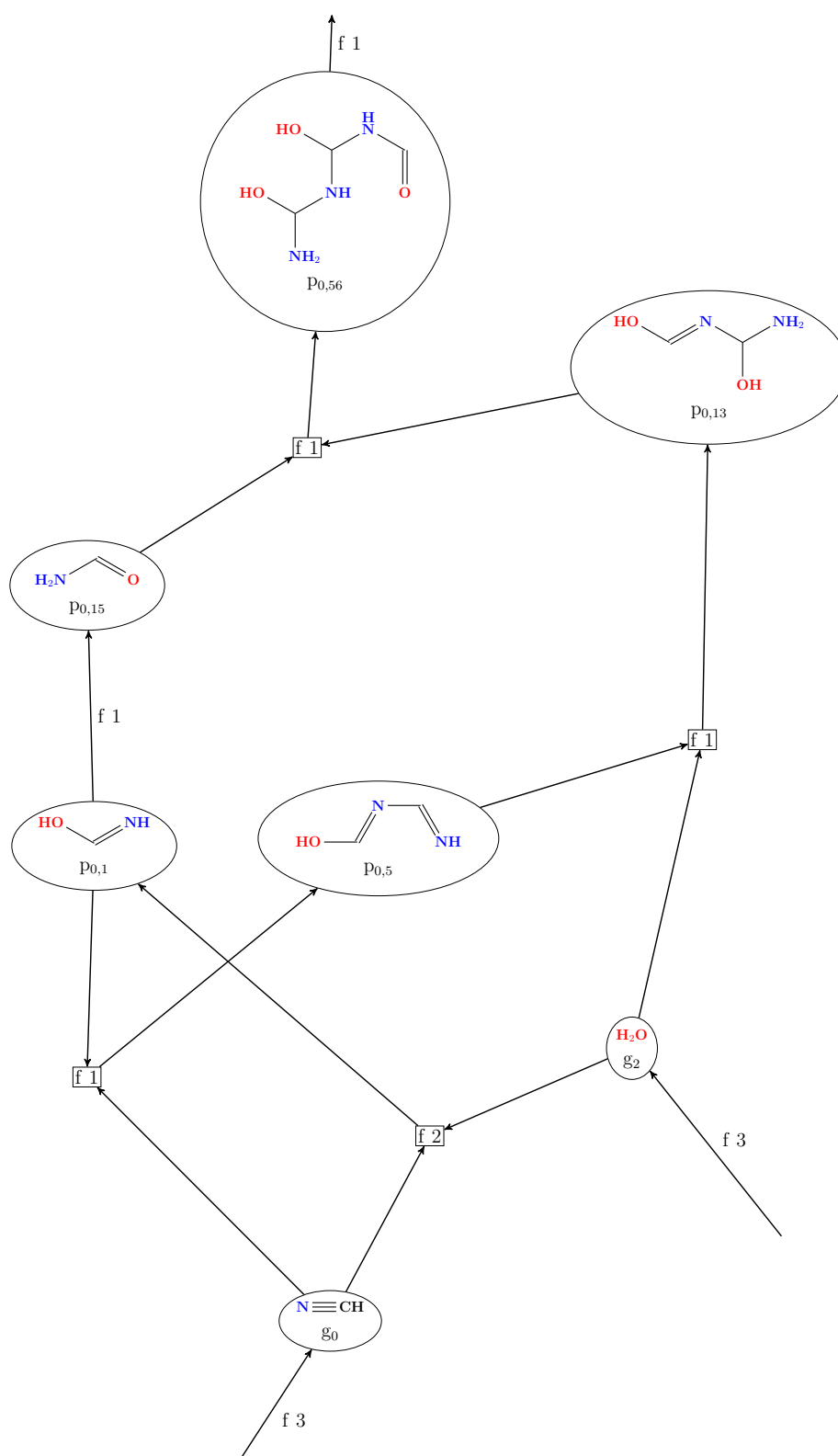
0.3.2 Solution 1

Overall Data

Objective value (non-integral): -0.113219

Vertex/Graph	In	Out	G	logK	t_order
$g_{\{0\}}$	3	0	-5.507152	1.000000	0
$g_{\{2\}}$	3	0	-5.068043	0.000000	0
$p_{\{0,13\}}$	0	0	-21.240635	1.000000	3
$p_{\{0,15\}}$	0	0	-10.625174	0.000000	2
$p_{\{0,1\}}$	0	0	-10.610101	0.000000	1
$p_{\{0,56\}}$	0	1	-31.869324	0.000000	67
$p_{\{0,5\}}$	0	0	-16.158998	0.000000	2

Filtered Graph



File: out/040_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	1.0	-14455.699793	0
g_2	3	0	-13306.144961	0.0	-13306.144961	0
$p_{0,1}$	0	0	-27856.817054	0.0	-27856.817054	1
$p_{0,5}$	0	0	-42425.44262	0.0	-42425.44262	2
$p_{0,13}$	0	0	-55767.279594	1.0	-55763.953809	3
$p_{0,15}$	0	0	-27896.389963	0.0	-27896.389963	2
$p_{0,56}$	0	1	-83672.898792	0.0	-83672.898792	67

Hyperedge	Source	Target	Flow	$x_e^{\Delta G}$	$\bar{x}_e^{\Delta G}$
6	$g_0, g_2,$	$p_{0,1},$	2	-93.916364	-93.916364
14	$g_0, p_{0,1},$	$p_{0,5},$	1	-111.869837	-111.869837
36	$p_{0,1},$	$p_{0,15},$	1	-39.572909	-39.572909
123	$g_2, p_{0,5},$	$p_{0,13},$	1	-33.422164	-33.422164
169	$p_{0,13}, p_{0,15},$	$p_{0,56},$	1	-11.499083	-11.499083
Sum					-297.2566754947565

$$\Delta G = -38.41967110185993$$

$$\Delta E = -0.11321908829270699$$

$$|E| = 6$$

$$|U| = 5$$

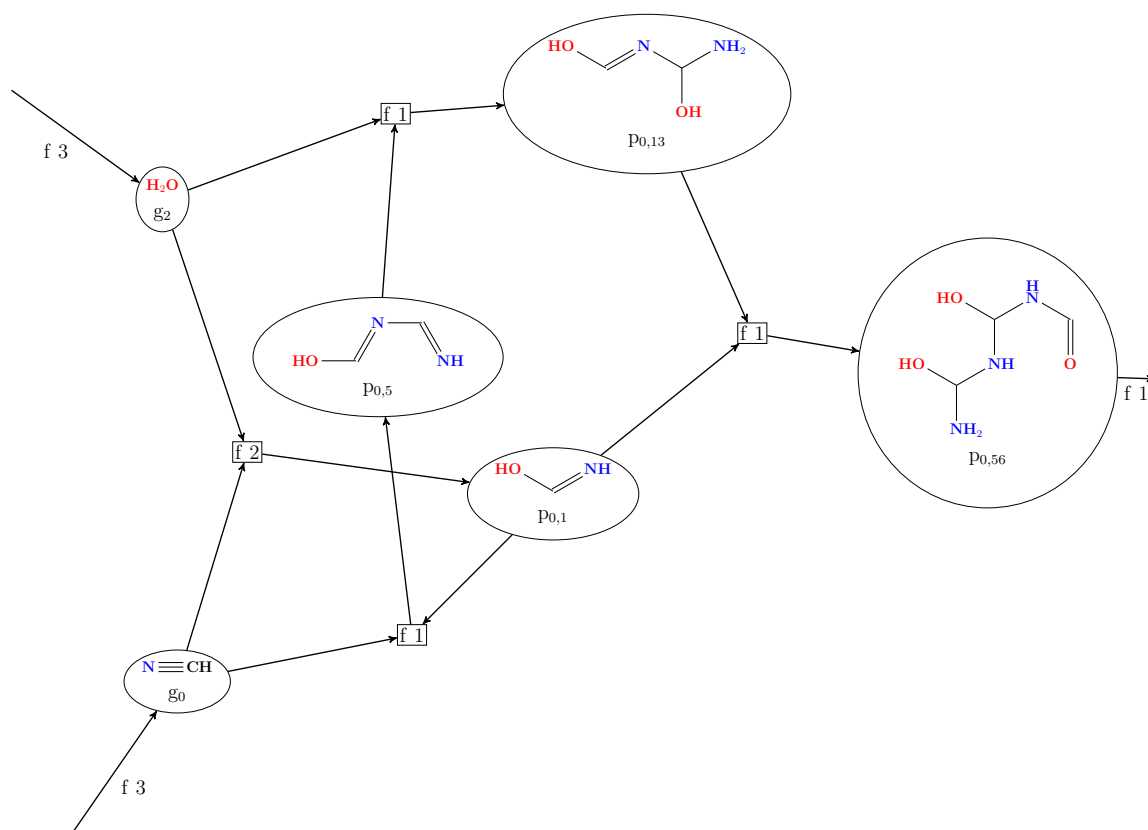
0.3.3 Solution 2

Overall Data

Objective value (non-integral): -0.113219

Vertex/Graph	In	Out	G	logK	t_order
$g_{\{0\}}$	3	0	-5.507152	1.000000	0
$g_{\{2\}}$	3	0	-5.068043	0.000000	0
$p_{\{0,13\}}$	0	0	-21.240678	0.000000	65
$p_{\{0,1\}}$	0	0	-10.610101	1.000000	1
$p_{\{0,56\}}$	0	1	-31.869324	0.000000	67
$p_{\{0,5\}}$	0	0	-16.158998	1.000000	64

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	1.0	-14455.699793	0
g_2	3	0	-13306.144961	0.0	-13306.144961	0
$p_{0,1}$	0	0	-27856.817054	1.0	-27853.491269	1
$p_{0,5}$	0	0	-42425.44262	1.0	-42422.116835	64
$p_{0,13}$	0	0	-55767.391129	0.0	-55767.391129	65
$p_{0,56}$	0	1	-83672.898792	0.0	-83672.898792	67

Hyperedge	Source	Target	Flow	$x_e^{\Delta G}$	$\bar{x}_e^{\Delta G}$
6	$g_0, g_2,$	$p_{0,1},$	2	-91.646516	-91.646516
14	$g_0, p_{0,1},$	$p_{0,5},$	1	-111.869837	-111.869837
123	$g_2, p_{0,5},$	$p_{0,13},$	1	-38.073396	-38.073396
263	$p_{0,1}, p_{0,13},$	$p_{0,56},$	1	-50.960457	-50.960457
Sum					-297.25667549475463

$$\Delta G = -38.41967136440989$$

$$\Delta E = -0.11321908829270627$$

$$|E| = 5$$

$$|U| = 4$$

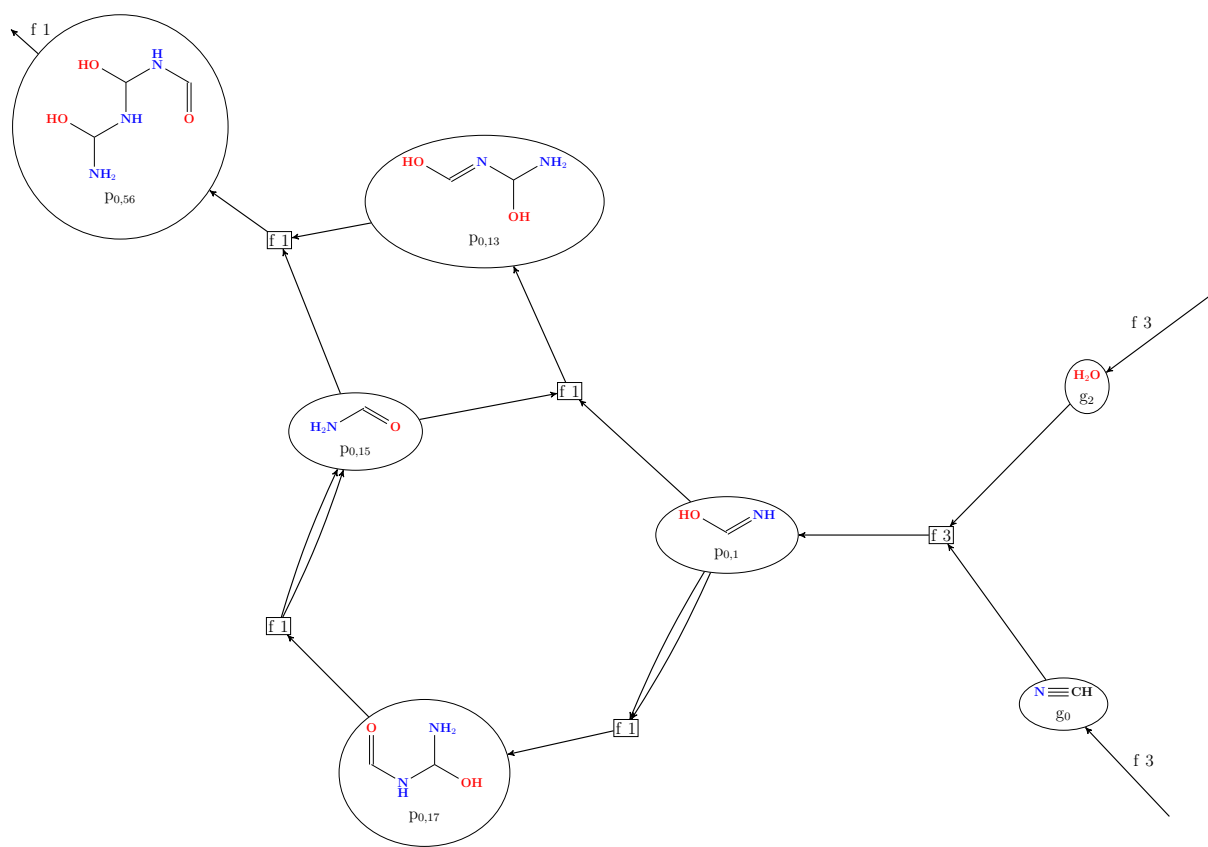
0.3.4 Solution 3

Overall Data

Objective value (non-integral): -0.0774483

Vertex/Graph	In	Out	G	logK	t_order
$g_{\{0\}}$	3	0	-5.507152	1.000000	0
$g_{\{2\}}$	3	0	-5.068043	1.000000	0
$p_{\{0,13\}}$	0	0	-21.240678	1.000000	35
$p_{\{0,15\}}$	0	0	-10.625174	1.000000	31
$p_{\{0,17\}}$	0	0	-21.248887	0.307497	30
$p_{\{0,1\}}$	0	0	-10.610101	1.000000	1
$p_{\{0,56\}}$	0	1	-31.869324	0.000000	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	1.0	-14455.699793	0
g_2	3	0	-13306.144961	1.0	-13302.819176	0
$p_{0,1}$	0	0	-27856.817054	1.0	-27853.491269	1
$p_{0,13}$	0	0	-55767.391129	1.0	-55764.065344	35
$p_{0,15}$	0	0	-27896.389963	1.0	-27893.064178	31
$p_{0,17}$	0	0	-55788.944315	0.307497	-55787.921644	30
$p_{0,56}$	0	1	-83672.898792	0.0	-83672.898792	67

Hyperedge	Source	Target	Flow	$x_e^{\Delta G}$	$\bar{x}_e^{\Delta G}$
6	$g_0, g_2,$	$p_{0,1},$	3	-93.916364	-93.916364
40	$p_{0,1}, p_{0,1},$	$p_{0,17},$	1	-79.15193	-79.15193
169	$p_{0,13}, p_{0,15},$	$p_{0,56},$	1	-13.657397	-13.657397
192	$p_{0,1}, p_{0,15},$	$p_{0,13},$	1	-16.45396	-16.45396
237	$p_{0,17},$	$p_{0,15}, p_{0,15},$	1	0.006113	0.006113
Sum					-203.34049495278154

$$\Delta G = -39.100625414254814$$

$$\Delta E = -0.07744830427516443$$

$$|E| = 7$$

$$|U| = 5$$

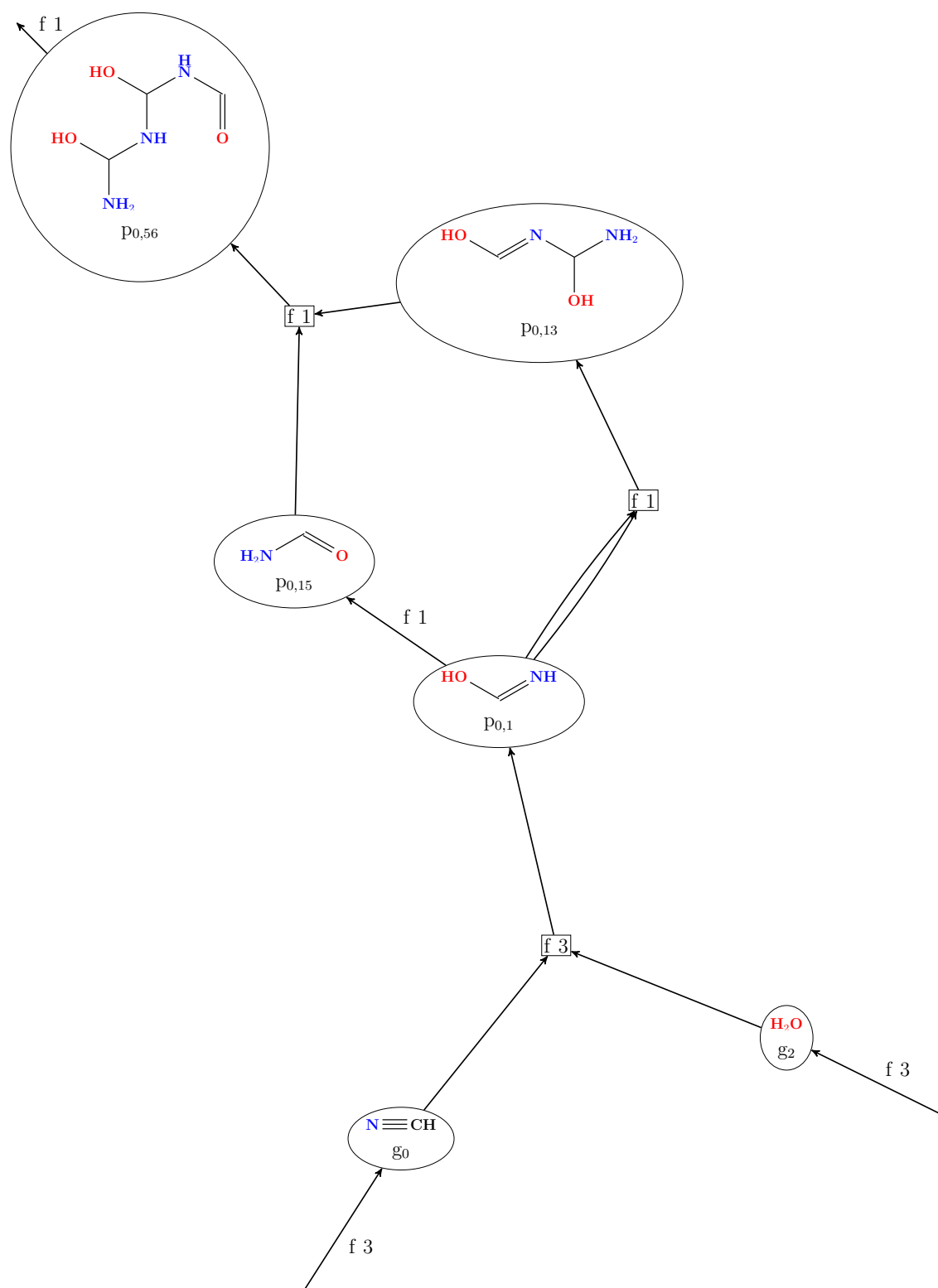
0.3.5 Solution 4

Overall Data

Objective value (non-integral): -0.0774483

Vertex/Graph	In	Out	G	logK	t_order
$g_{\{0\}}$	3	0	-5.507152	0.000000	0
$g_{\{2\}}$	3	0	-5.068033	0.000000	0
$p_{\{0,13\}}$	0	0	-21.240678	0.000000	3
$p_{\{0,15\}}$	0	0	-10.625174	0.000000	2
$p_{\{0,1\}}$	0	0	-10.610101	1.000000	1
$p_{\{0,56\}}$	0	1	-31.869260	1.000000	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	0.0	-14459.025578	0
g_2	3	0	-13306.118349	0.0	-13306.118349	0
$p_{0,1}$	0	0	-27856.817054	1.0	-27853.491269	1
$p_{0,13}$	0	0	-55767.391129	0.0	-55767.391129	3
$p_{0,15}$	0	0	-27896.389963	0.0	-27896.389963	2
$p_{0,56}$	0	1	-83672.731446	1.0	-83669.405661	67

Hyperedge	Source	Target	Flow	$x_e^{\Delta G}$	$\bar{x}_e^{\Delta G}$
6	$g_0, g_2,$	$p_{0,1},$	3	-89.40328	-89.40328
30	$p_{0,1}, p_{0,1},$	$p_{0,13},$	1	-58.296717	-58.296717
36	$p_{0,1},$	$p_{0,15},$	1	-41.842757	-41.842757
169	$p_{0,13}, p_{0,15},$	$p_{0,56},$	1	-6.680506	-6.680506
Sum					-203.34049495277878

$\Delta G = -37.502980790785095$

$\Delta E = -0.07744830427516337$

$|E| = 6$

$|U| = 4$

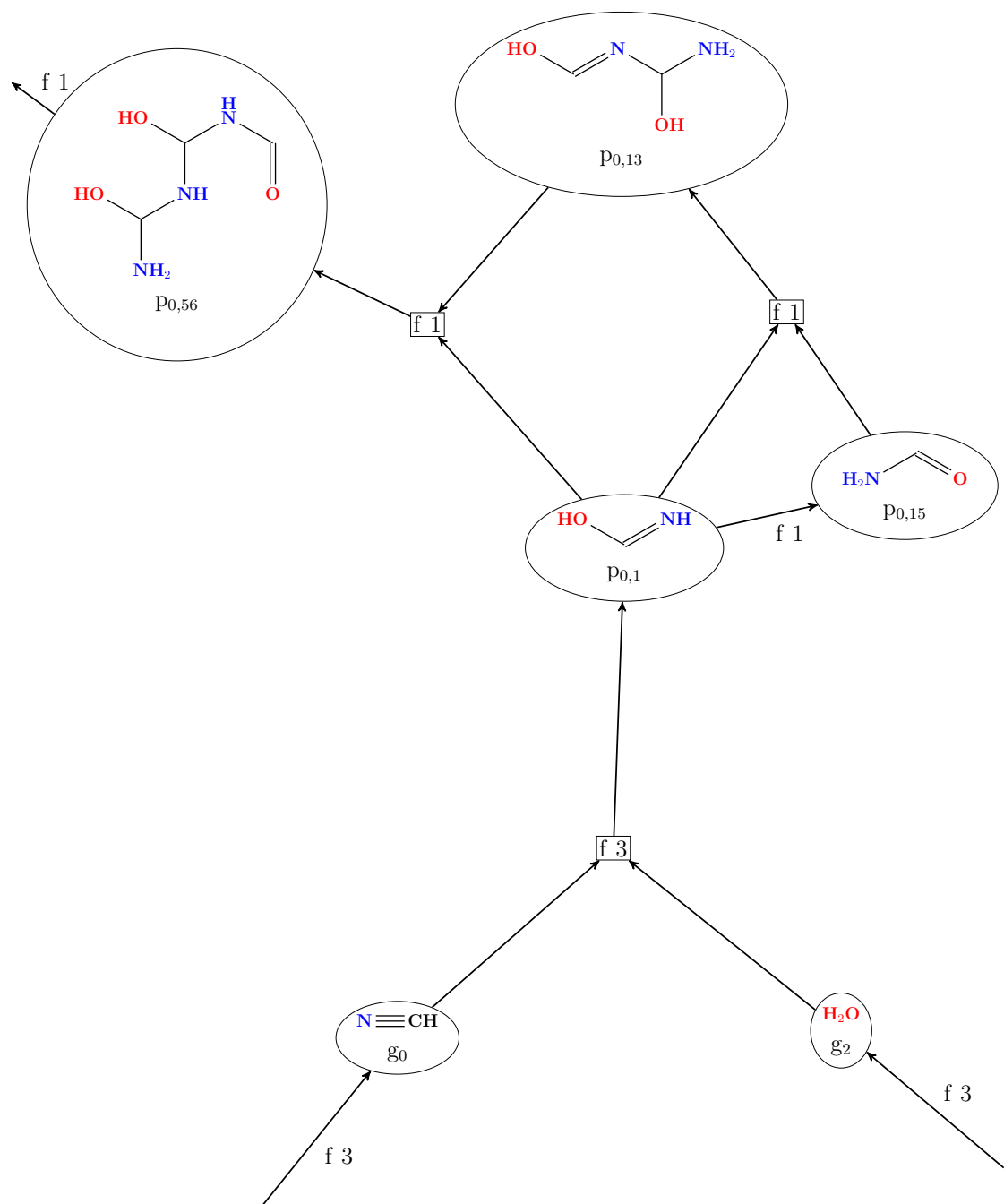
0.3.6 Solution 5

Overall Data

Objective value (non-integral): -0.0774483

Vertex/Graph	In	Out	G	logK	t_order
$g_{\{0\}}$	3	0	-5.507152	1.000000	0
$g_{\{2\}}$	3	0	-5.068043	1.000000	0
$p_{\{0,13\}}$	0	0	-21.240678	0.000000	35
$p_{\{0,15\}}$	0	0	-10.625174	0.000000	32
$p_{\{0,1\}}$	0	0	-10.610101	0.000000	1
$p_{\{0,56\}}$	0	1	-31.869260	1.000000	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	1.0	-14455.699793	0
g_2	3	0	-13306.144961	1.0	-13302.819176	0
$p_{0,1}$	0	0	-27856.817054	0.0	-27856.817054	1
$p_{0,13}$	0	0	-55767.391129	0.0	-55767.391129	35
$p_{0,15}$	0	0	-27896.389963	0.0	-27896.389963	32
$p_{0,56}$	0	1	-83672.731446	1.0	-83669.405661	67

Hyperedge	Source	Target	Flow	$x_e^{\Delta G}$	$\bar{x}_e^{\Delta G}$
6	$g_0, g_2,$	$p_{0,1},$	3	-96.186212	-96.186212
36	$p_{0,1},$	$p_{0,15},$	1	-39.572909	-39.572909
192	$p_{0,1}, p_{0,15},$	$p_{0,13},$	1	-14.184112	-14.184112
263	$p_{0,1}, p_{0,13},$	$p_{0,56},$	1	-46.253415	-46.253415
Sum					-203.34049495277685

$$\Delta G = -38.856906321371056$$

$$\Delta E = -0.07744830427516264$$

$$|E| = 6$$

$$|U| = 4$$

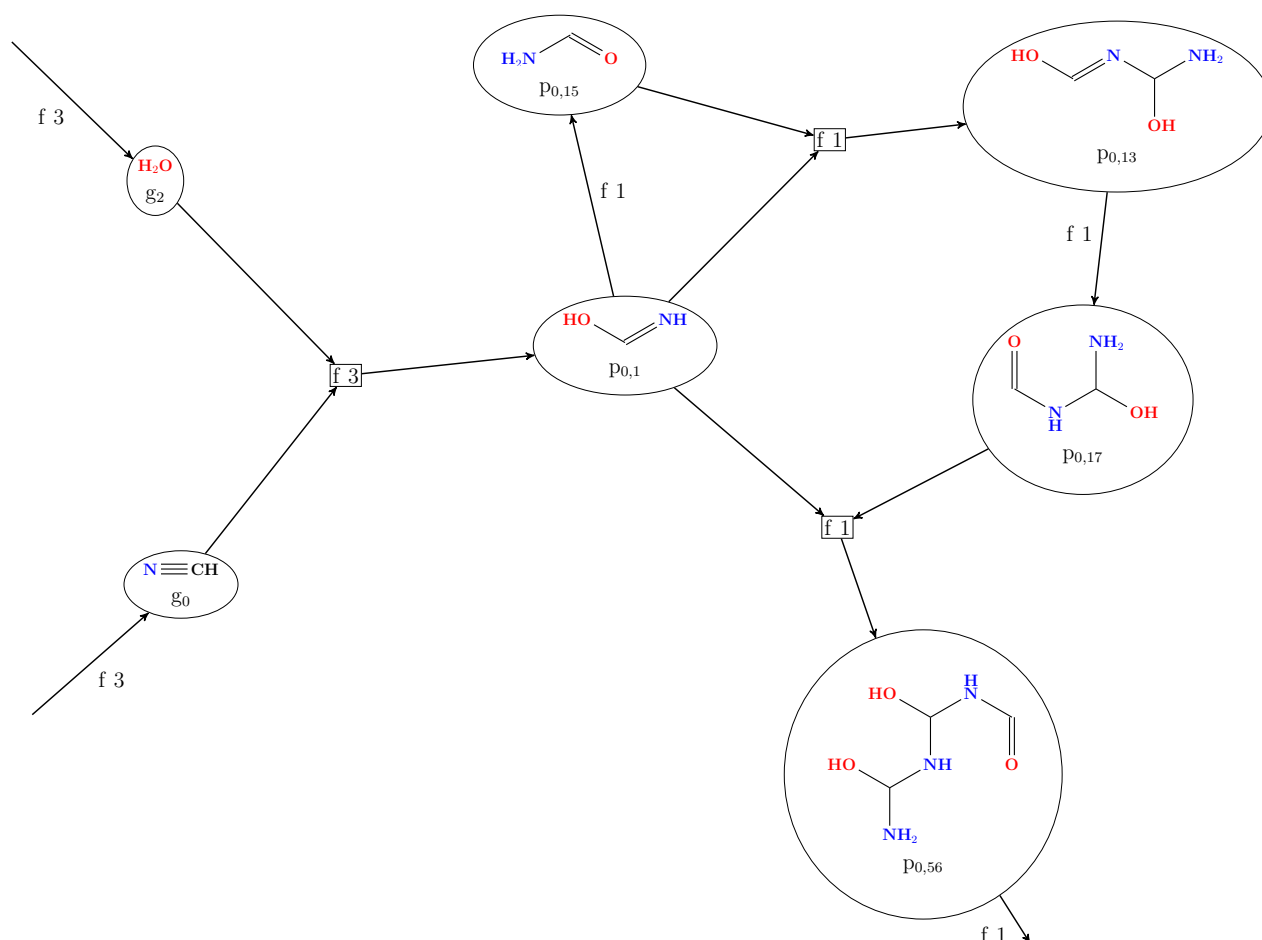
0.3.7 Solution 6

Overall Data

Objective value (non-integral): -0.0774483

Vertex/Graph	In	Out	G	logK	t_order
$g_{\{0\}}$	3	0	-5.507152	1.000000	0
$g_{\{2\}}$	3	0	-5.068043	1.000000	20
$p_{\{0,13\}}$	0	0	-21.240635	1.000000	44
$p_{\{0,15\}}$	0	0	-10.625195	0.000000	22
$p_{\{0,17\}}$	0	0	-21.248887	1.000000	45
$p_{\{0,1\}}$	0	0	-10.610080	1.000000	21
$p_{\{0,56\}}$	0	1	-31.869324	0.000000	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	1.0	-14455.699793	0
g_2	3	0	-13306.144961	1.0	-13302.819176	20
$p_{0,1}$	0	0	-27856.761341	1.0	-27853.435556	21
$p_{0,13}$	0	0	-55767.279594	1.0	-55763.953809	44
$p_{0,15}$	0	0	-27896.445756	0.0	-27896.445756	22
$p_{0,17}$	0	0	-55788.944315	1.0	-55785.61853	45
$p_{0,56}$	0	1	-83672.898792	0.0	-83672.898792	67

Hyperedge	Source	Target	Flow	$x_e^{\Delta G}$	$\bar{x}_e^{\Delta G}$
6	$g_0, g_2,$	$p_{0,1},$	3	-93.86065	-93.86065
36	$p_{0,1},$	$p_{0,15},$	1	-41.954263	-41.954263
192	$p_{0,1}, p_{0,15},$	$p_{0,13},$	1	-14.072498	-14.072498
196	$p_{0,1}, p_{0,17},$	$p_{0,56},$	1	-31.732833	-31.732833
250	$p_{0,13},$	$p_{0,17},$	1	-21.664721	-21.664721
Sum				-203.34049495277685	

$$\Delta G = -39.100625414254814$$

$$\Delta E = -0.07744830427516264$$

$|E| = 7$
 $|U| = 5$

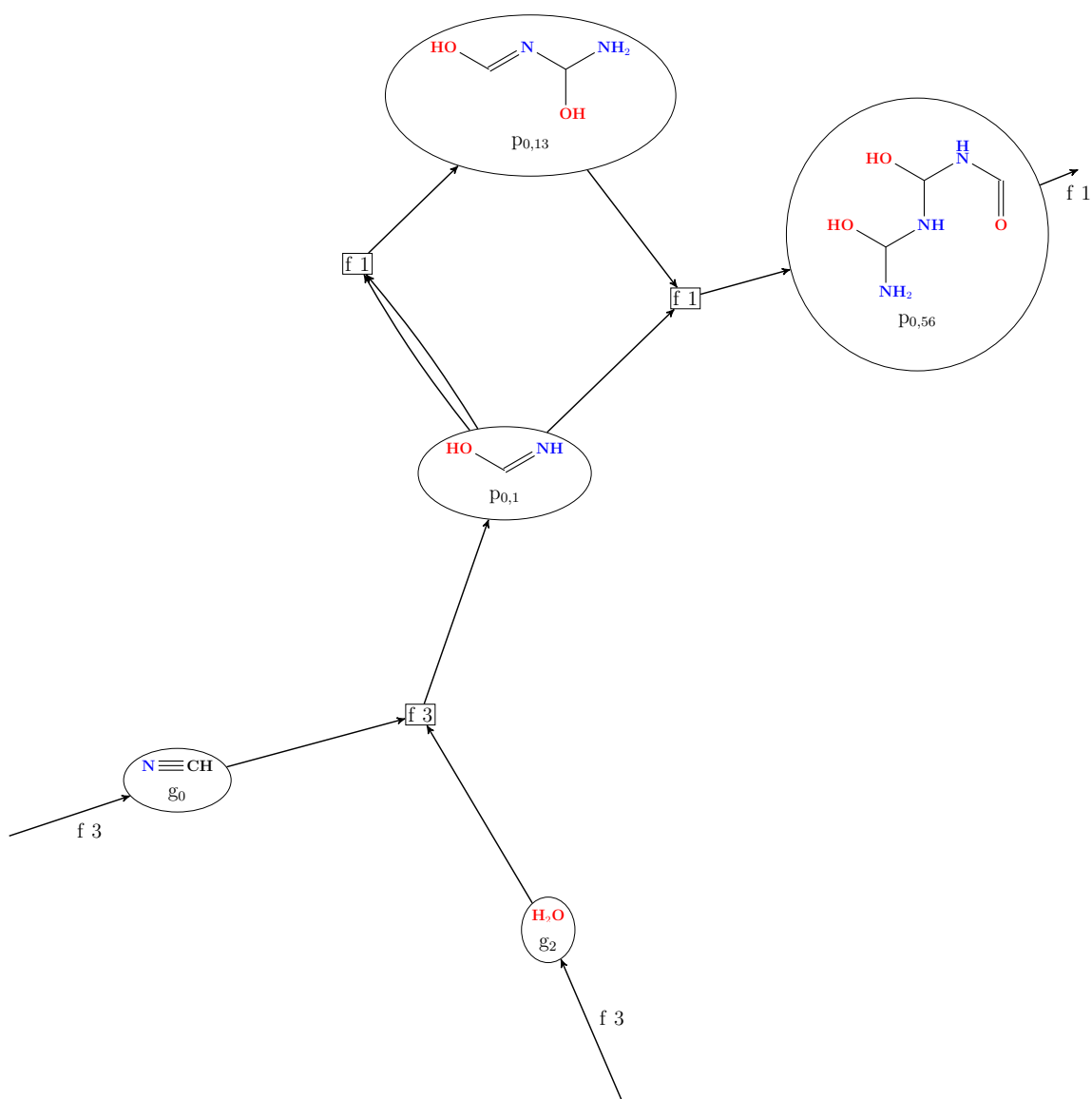
0.3.8 Solution 7

Overall Data

Objective value (non-integral): -0.0774483

Vertex/Graph	In	Out	G	logK	t_order
$g_{\{0\}}$	3	0	-5.507152	0.000000	0
$g_{\{2\}}$	3	0	-5.068033	0.000000	0
$p_{\{0,13\}}$	0	0	-21.240635	1.000000	3
$p_{\{0,1\}}$	0	0	-10.610080	1.000000	1
$p_{\{0,56\}}$	0	1	-31.869324	0.000000	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	0.0	-14459.025578	0
g_2	3	0	-13306.118349	0.0	-13306.118349	0
$p_{0,1}$	0	0	-27856.761341	1.0	-27853.435556	1
$p_{0,13}$	0	0	-55767.279594	1.0	-55763.953809	3
$p_{0,56}$	0	1	-83672.898792	0.0	-83672.898792	67

Hyperedge	Source	Target	Flow	$x_e^{\Delta G}$	$\bar{x}_e^{\Delta G}$
6	$g_0, g_2,$	$p_{0,1},$	3	-89.347566	-89.347566
30	$p_{0,1}, p_{0,1},$	$p_{0,13},$	1	-56.026761	-56.026761
263	$p_{0,1}, p_{0,13},$	$p_{0,56},$	1	-53.397553	-53.397553
Sum					-203.34049495277685

$$\Delta G = -37.74670067131874$$

$$\Delta E = -0.07744830427516264$$

$$|E| = 5$$

$$|U| = 3$$

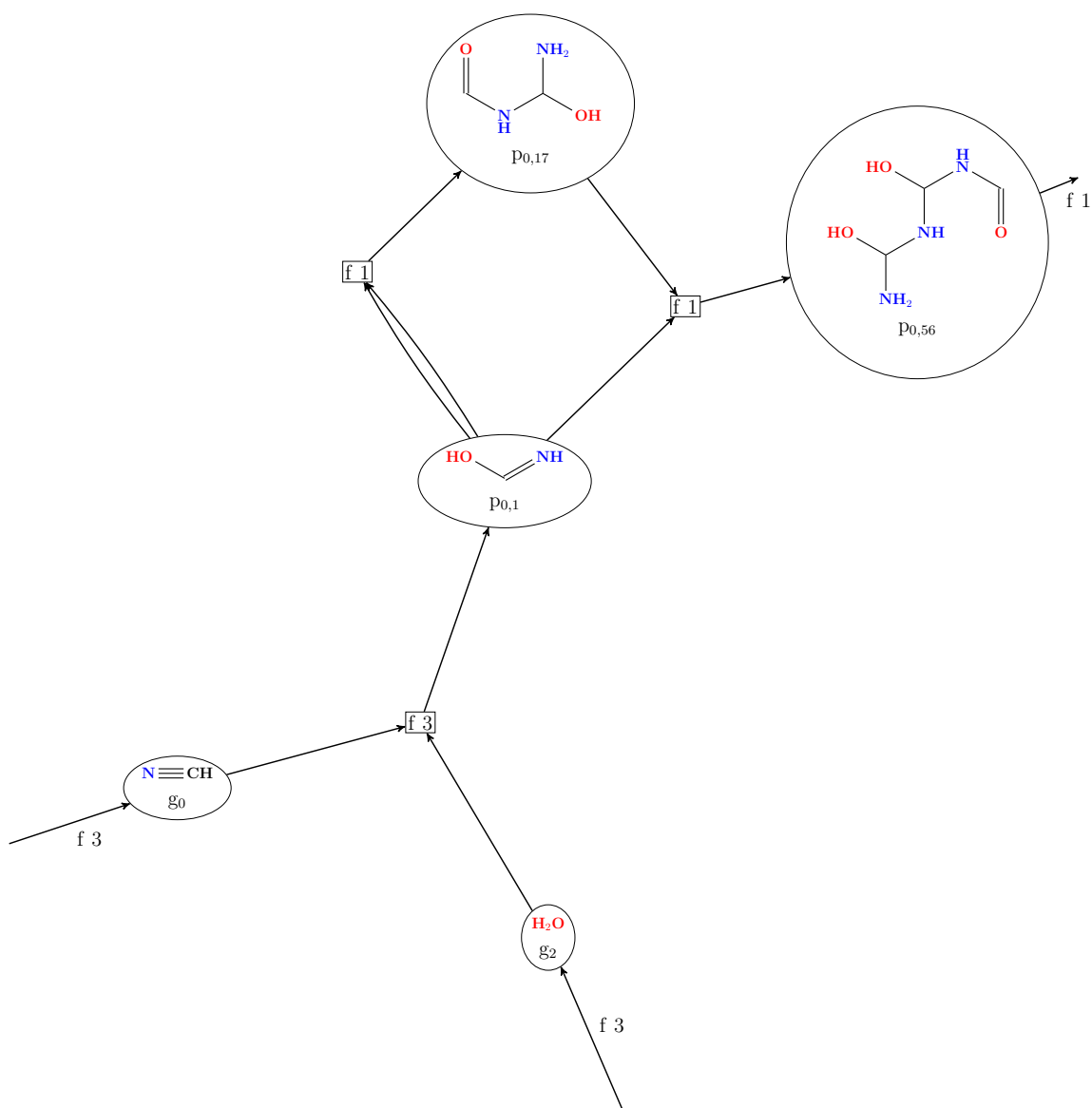
0.3.9 Solution 8

Overall Data

Objective value (non-integral): -0.0774483

Vertex/Graph	In	Out	G	logK	t_order
$g_{\{0\}}$	3	0	-5.507152	1.000000	0
$g_{\{2\}}$	3	0	-5.068033	1.000000	0
$p_{\{0,17\}}$	0	0	-21.248844	1.000000	65
$p_{\{0,1\}}$	0	0	-10.610080	1.000000	1
$p_{\{0,56\}}$	0	1	-31.869324	0.000000	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	1.0	-14455.699793	0
g_2	3	0	-13306.118349	1.0	-13302.792564	0
$p_{0,1}$	0	0	-27856.761341	1.0	-27853.435556	1
$p_{0,17}$	0	0	-55788.832737	1.0	-55785.506952	65
$p_{0,56}$	0	1	-83672.898792	0.0	-83672.898792	67

Hyperedge	Source	Target	Flow	$x_e^{\Delta G}$	$\bar{x}_e^{\Delta G}$
6	$g_0, g_2,$	$p_{0,1},$	3	-93.887263	-93.887263
40	$p_{0,1}, p_{0,1},$	$p_{0,17},$	1	-77.579904	-77.579904
196	$p_{0,1}, p_{0,17},$	$p_{0,56},$	1	-31.844411	-31.844411
Sum					-203.34049495277685

$$\Delta G = -39.10860929610851$$

$$\Delta E = -0.07744830427516264$$

$$|E| = 5$$

$$|U| = 3$$

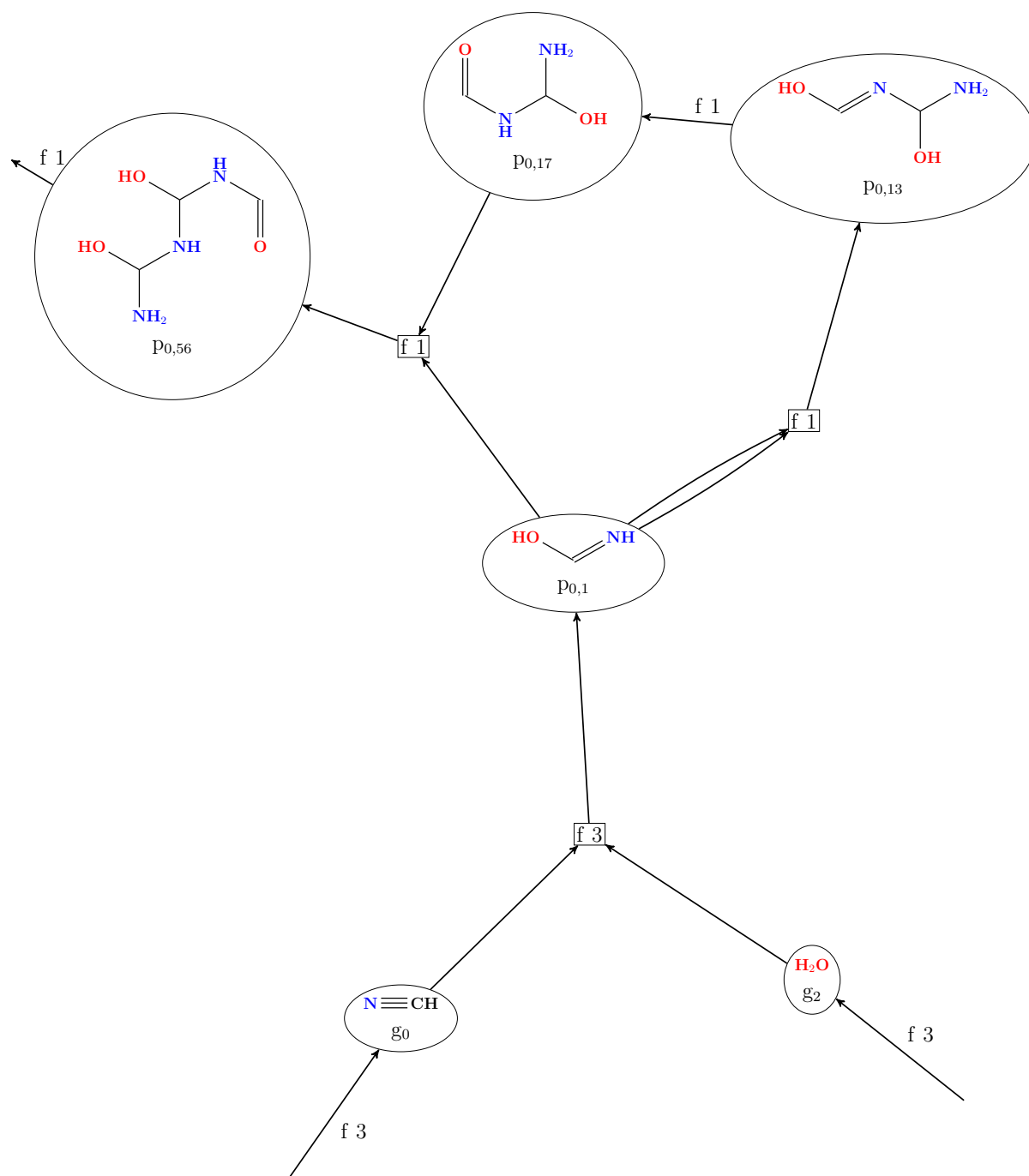
0.3.10 Solution 9

Overall Data

Objective value (non-integral): -0.0774483

Vertex/Graph	In	Out	G	logK	t_order
$g_{\{0\}}$	3	0	-5.507152	1.000000	0
$g_{\{2\}}$	3	0	-5.068033	0.000000	0
$p_{\{0,13\}}$	0	0	-21.240635	1.000000	64
$p_{\{0,17\}}$	0	0	-21.248844	1.000000	65
$p_{\{0,1\}}$	0	0	-10.610080	1.000000	1
$p_{\{0,56\}}$	0	1	-31.869324	0.000000	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	1.0	-14455.699793	0
g_2	3	0	-13306.118349	0.0	-13306.118349	0
$p_{0,1}$	0	0	-27856.761341	1.0	-27853.435556	1
$p_{0,13}$	0	0	-55767.279594	1.0	-55763.953809	64
$p_{0,17}$	0	0	-55788.832737	1.0	-55785.506952	65
$p_{0,56}$	0	1	-83672.898792	0.0	-83672.898792	67

Hyperedge	Source	Target	Flow	$x_e^{\Delta G}$	$\bar{x}_e^{\Delta G}$
6	$g_0, g_2,$	$p_{0,1},$	3	-91.617414	-91.617414
30	$p_{0,1}, p_{0,1},$	$p_{0,13},$	1	-56.026761	-56.026761
196	$p_{0,1}, p_{0,17},$	$p_{0,56},$	1	-31.844411	-31.844411
250	$p_{0,13},$	$p_{0,17},$	1	-21.553143	-21.553143
Sum					-203.34049495277685

$$\Delta G = -38.42765524626359$$

$$\Delta E = -0.07744830427516264$$

$$|E| = 6$$

$$|U| = 4$$

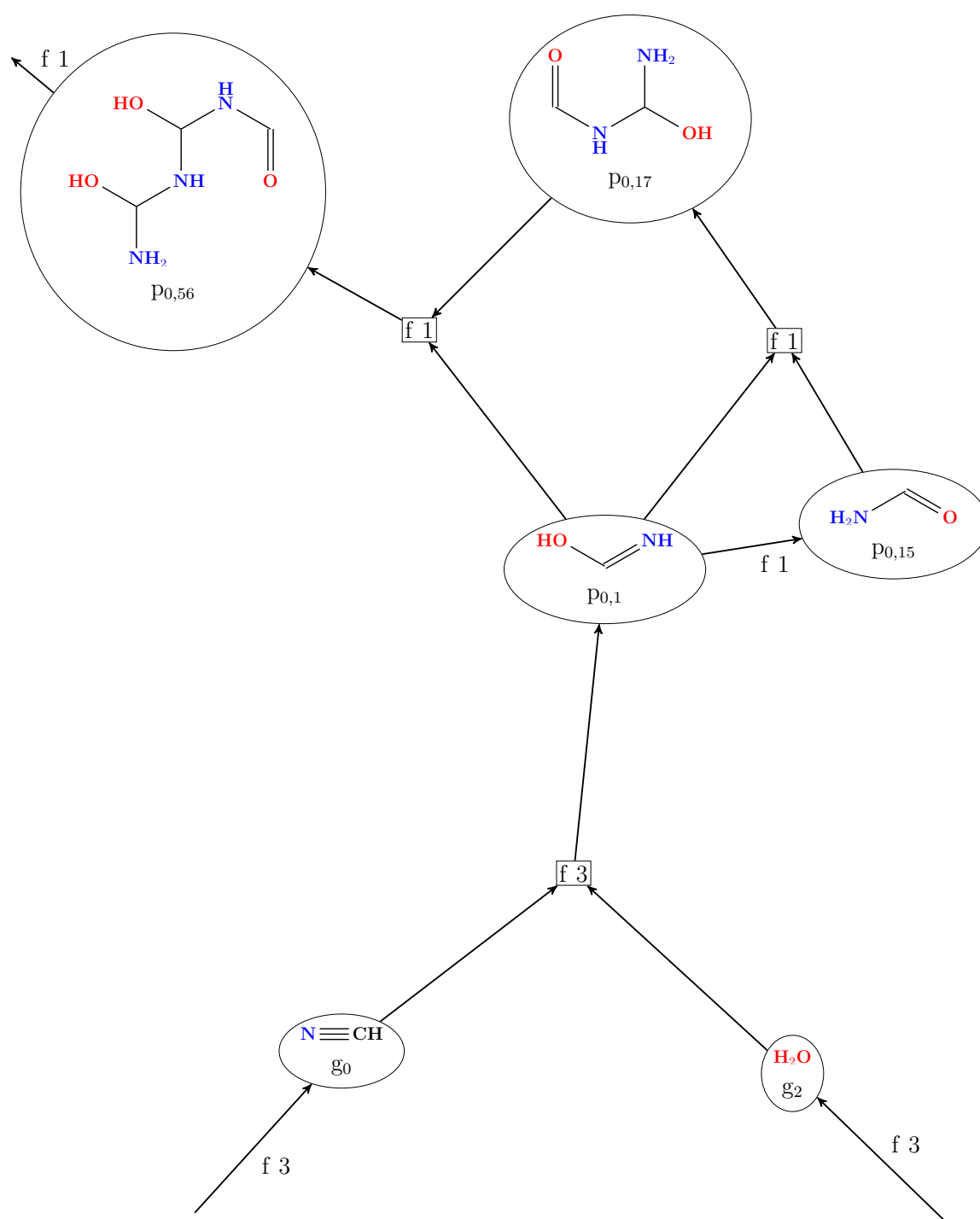
0.3.11 Solution 10

Overall Data

Objective value (non-integral): -0.0774483

Vertex/Graph	In	Out	G	logK	t_order
$g_{\{0\}}$	3	0	-5.507152	1.000000	0
$g_{\{2\}}$	3	0	-5.068043	0.000000	0
$p_{\{0,15\}}$	0	0	-10.625195	0.000000	2
$p_{\{0,17\}}$	0	0	-21.248844	1.000000	4
$p_{\{0,1\}}$	0	0	-10.610080	1.000000	1
$p_{\{0,56\}}$	0	1	-31.869324	0.000000	67

Filtered Graph



File: out/121_dg_0_11100_f_0_10_filt

Vertex	InFlow	OutFlow	$x_v^{\Delta G^0}$	x_v^K	$x_v^{\Delta G}$	t_v
g_0	3	0	-14459.025578	1.0	-14455.699793	0
g_2	3	0	-13306.144961	0.0	-13306.144961	0
$p_{0,1}$	0	0	-27856.761341	1.0	-27853.435556	1
$p_{0,15}$	0	0	-27896.445756	0.0	-27896.445756	2
$p_{0,17}$	0	0	-55788.832737	1.0	-55785.506952	4
$p_{0,56}$	0	1	-83672.898792	0.0	-83672.898792	67

Hyperedge	Source	Target	Flow	$x_e^{\Delta G}$	$\bar{x}_e^{\Delta G}$
6	$g_0, g_2,$	$p_{0,1},$	3	-91.590802	-91.590802
36	$p_{0,1},$	$p_{0,15},$	1	-41.954263	-41.954263
183	$p_{0,1}, p_{0,15},$	$p_{0,17},$	1	-35.625641	-35.625641
196	$p_{0,1}, p_{0,17},$	$p_{0,56},$	1	-31.844411	-31.844411
Sum					-203.3404949527722

$$\Delta G = -38.41967136440989$$

$$\Delta E = -0.07744830427516086$$

$$|E| = 6$$

$$|U| = 4$$

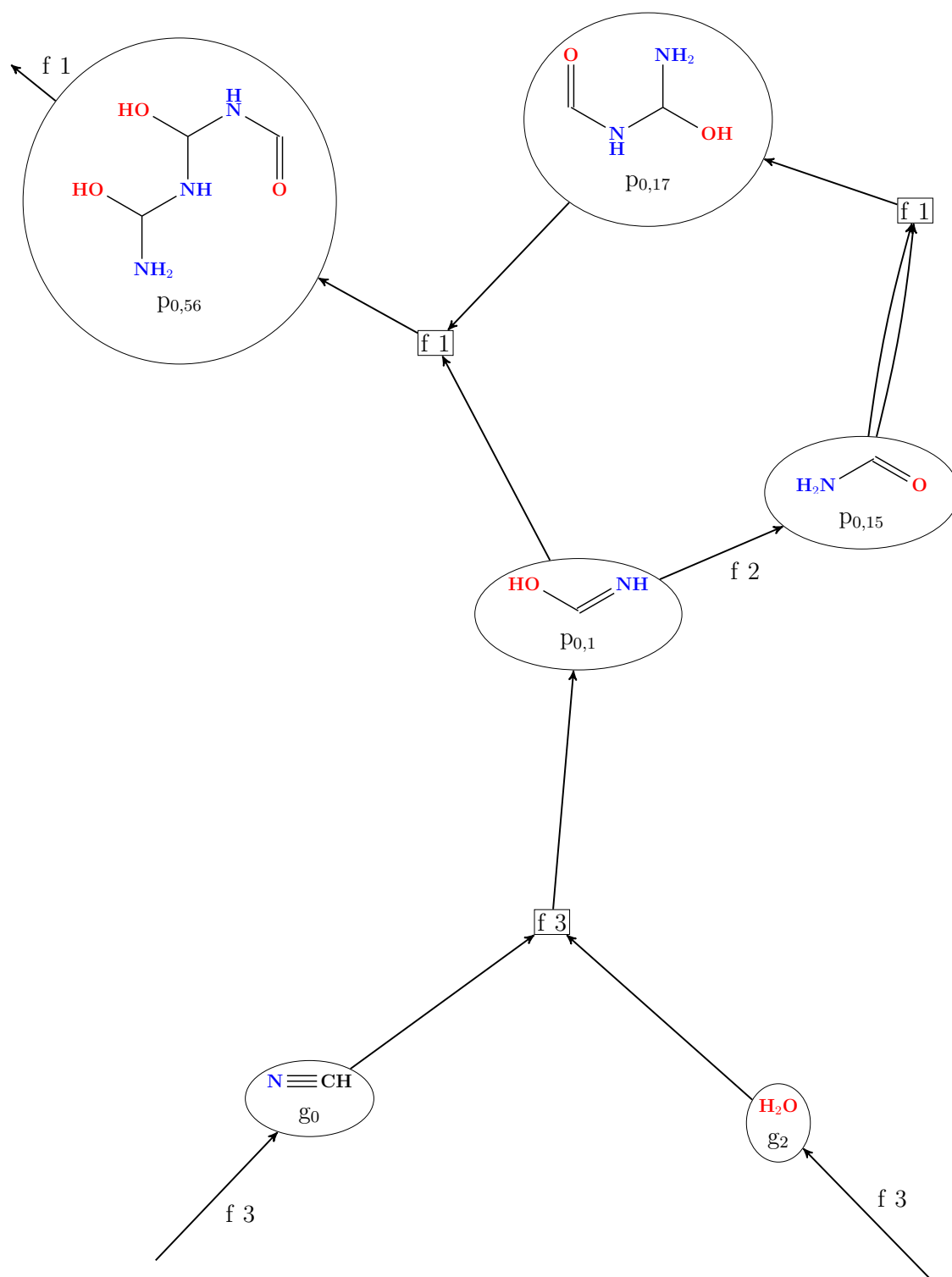
0.3.12 Solution 11

Overall Data

Objective value (non-integral): -0.0623546

Vertex/Graph	In	Out	G	logK	t_order
$g_{\{0\}}$	3	0	-5.507152	1.000000	0
$g_{\{2\}}$	3	0	-5.068043	1.000000	0
$p_{\{0,15\}}$	0	0	-10.625174	1.000000	32
$p_{\{0,17\}}$	0	0	-21.248844	0.261034	65
$p_{\{0,1\}}$	0	0	-10.610080	1.000000	1
$p_{\{0,56\}}$	0	1	-31.869324	0.000000	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	1.0	-14455.699793	0
g_2	3	0	-13306.144961	1.0	-13302.819176	0
$p_{0,1}$	0	0	-27856.761341	1.0	-27853.435556	1
$p_{0,15}$	0	0	-27896.389963	1.0	-27893.064178	32
$p_{0,17}$	0	0	-55788.832737	0.261034	-55787.964594	65
$p_{0,56}$	0	1	-83672.898792	0.0	-83672.898792	67

Hyperedge	Source	Target	Flow	$x_e^{\Delta G}$	$\bar{x}_e^{\Delta G}$
6	$g_0, g_2,$	$p_{0,1},$	3	-93.86065	-93.86065
36	$p_{0,1},$	$p_{0,15},$	2	-39.628622	-39.628622
180	$p_{0,15}, p_{0,15},$	$p_{0,17},$	1	0.0	0.0
196	$p_{0,1}, p_{0,17},$	$p_{0,56},$	1	-30.16707	-30.16707
Sum					-163.71187284898366

$\Delta G = -39.10062593935474$

$\Delta E = -0.06235455925692225$

$|E| = 7$

$|U| = 4$

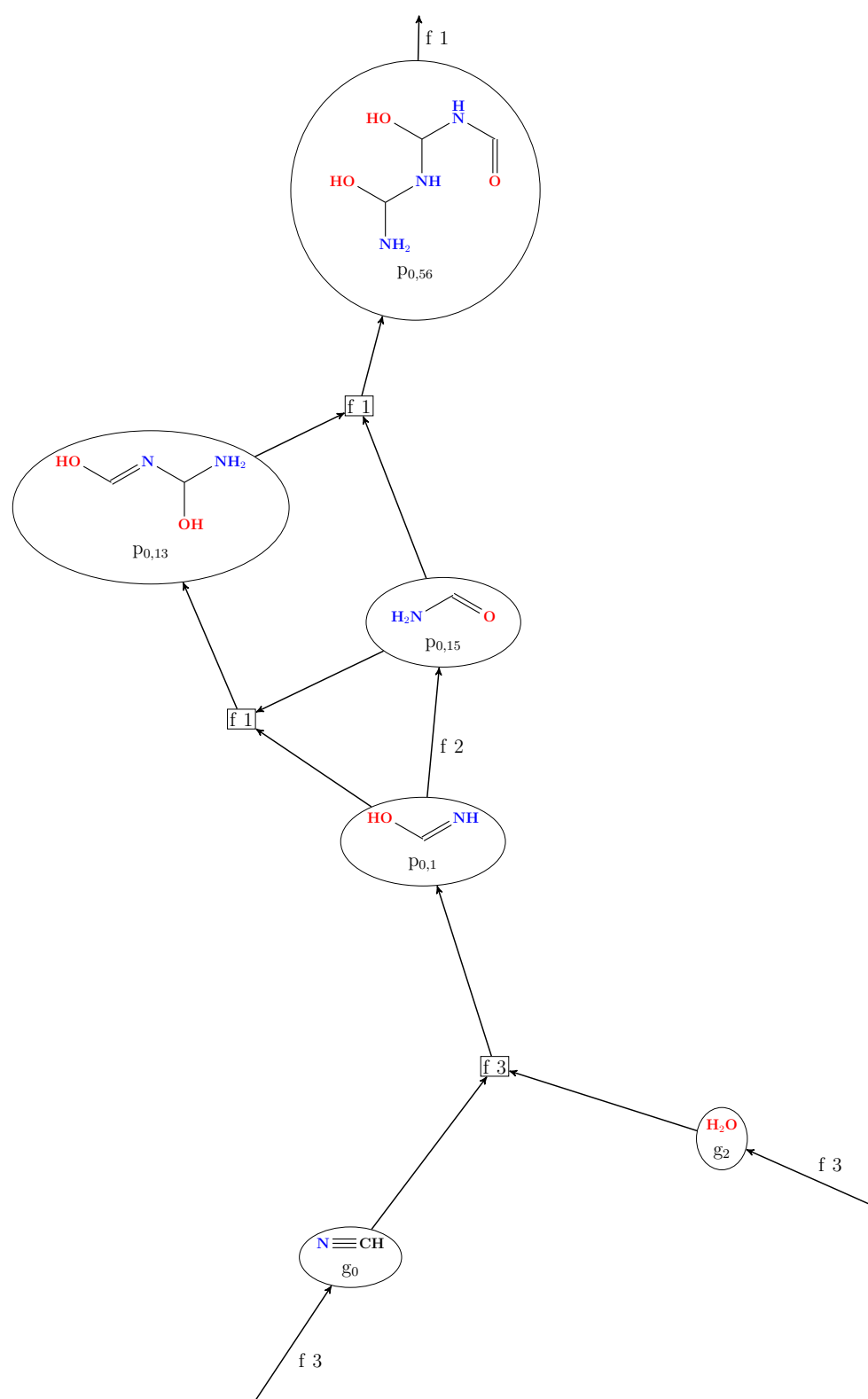
0.3.13 Solution 12

Overall Data

Objective value (non-integral): -0.0623546

Vertex/Graph	In	Out	G	logK	t_order
$g_{\{0\}}$	3	0	-5.507152	1.000000	0
$g_{\{2\}}$	3	0	-5.068043	1.000000	0
$p_{\{0,13\}}$	0	0	-21.240678	0.000000	4
$p_{\{0,15\}}$	0	0	-10.625174	1.000000	2
$p_{\{0,1\}}$	0	0	-10.610080	1.000000	1
$p_{\{0,56\}}$	0	1	-31.869324	0.000000	67

Filtered Graph



File: out/139_dg_0_11100_f_0_12_filt

Vertex	InFlow	OutFlow	$x_v^{\Delta G^0}$	x_v^K	$x_v^{\Delta G}$	t_v
g_0	3	0	-14459.025578	1.0	-14455.699793	0
g_2	3	0	-13306.144961	1.0	-13302.819176	0
$p_{0,1}$	0	0	-27856.761341	1.0	-27853.435556	1
$p_{0,13}$	0	0	-55767.391129	0.0	-55767.391129	4
$p_{0,15}$	0	0	-27896.389963	1.0	-27893.064178	2
$p_{0,56}$	0	1	-83672.898792	0.0	-83672.898792	67

Hyperedge	Source	Target	Flow	$x_e^{\Delta G}$	$\bar{x}_e^{\Delta G}$
6	$g_0, g_2,$	$p_{0,1},$	3	-93.86065	-93.86065
36	$p_{0,1},$	$p_{0,15},$	2	-39.628622	-39.628622
169	$p_{0,13}, p_{0,15},$	$p_{0,56},$	1	-11.387548	-11.387548
192	$p_{0,1}, p_{0,15},$	$p_{0,13},$	1	-18.779522	-18.779522
Sum					-163.71187284898176

$$\Delta G = -39.10062593935474$$

$$\Delta E = -0.06235455925692152$$

$$|E| = 7$$

$$|U| = 4$$