

Summary

December 6, 2024

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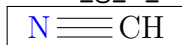
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0.1 Loaded Graphs

0.1.1 g_{0}

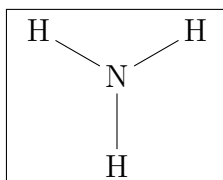


File: out/001_g_0_10300000



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0.1.2 g_{1}

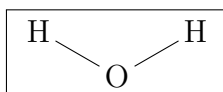


File: out/005_g_1_10300000



File: out/007_g_1_11310100

0.1.3 g_{2}



File: out/009_g_2_10300000



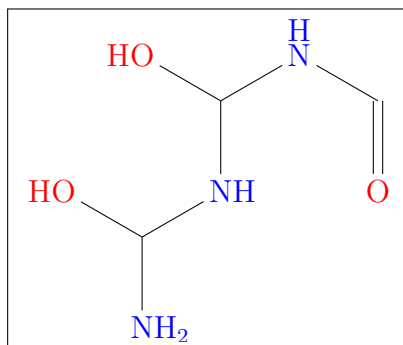
File: out/011_g_2_11310100

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

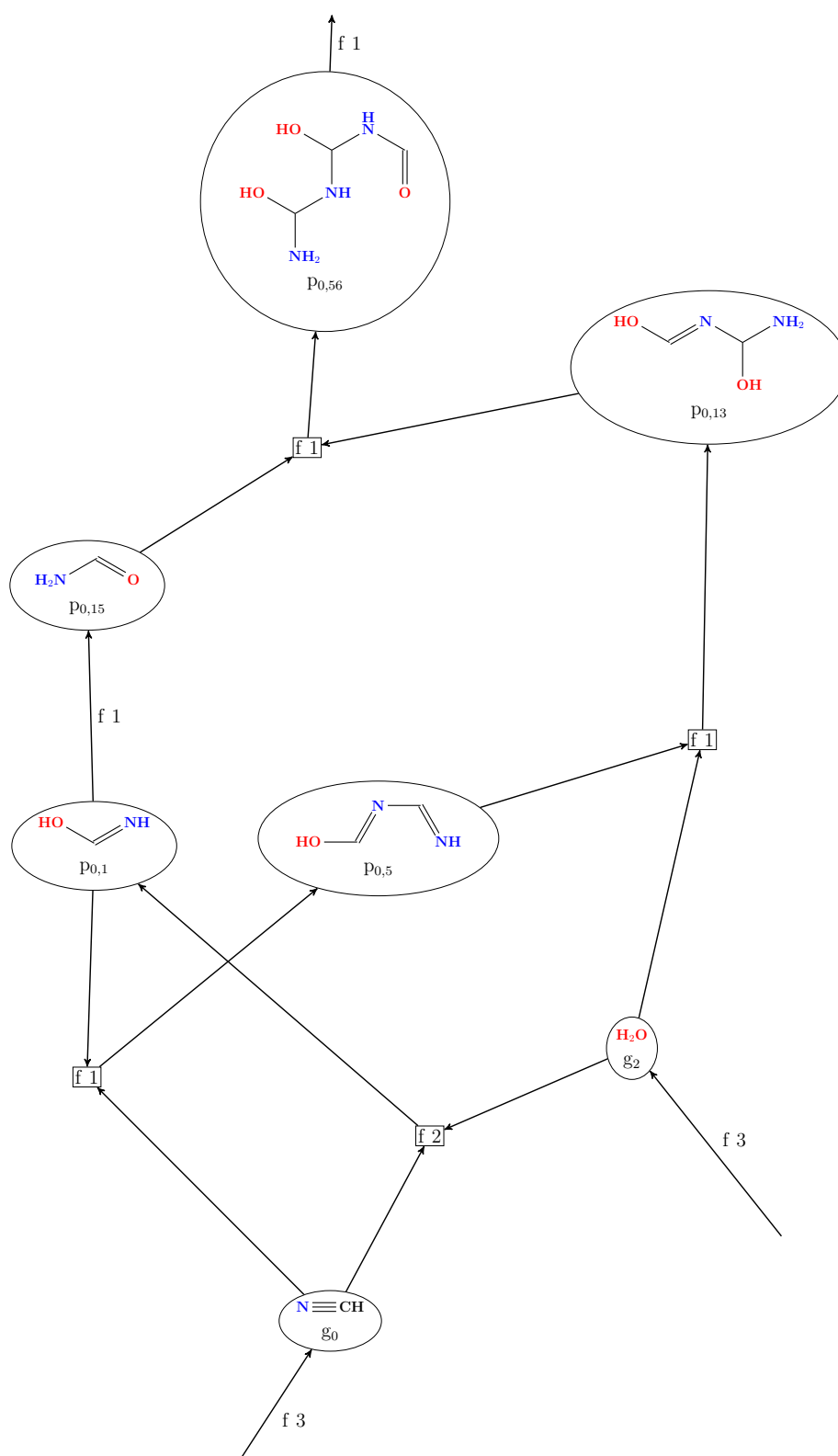
0.3.1 Solution 0

Overall Data

Objective value (non-integral): -0.113647

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	-21.240635	1.000000	3
p_{0,15}	0	0	-10.625174	0.000000	63
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	0.000000	2

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	-27856.817054	1.0	-27853.491269	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	63
$p_{0,56}$	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	-94.140854	-94.140854
14	$g_0, p_{0,1},$	$p_{0,5},$	1	-114.588666	-114.588666
36	$p_{0,1},$	$p_{0,15},$	1	-42.067247	-42.067247
123	$g_2, p_{0,5},$	$p_{0,13},$	1	-35.692013	-35.692013
169	$p_{0,13}, p_{0,15},$	$p_{0,56},$	1	-11.723574	-11.723574
Sum					-298.3791279481927

$$\Delta G = -39.23531984695927$$

$$\Delta E = -0.11364660785376796$$

$$|E| = 6$$

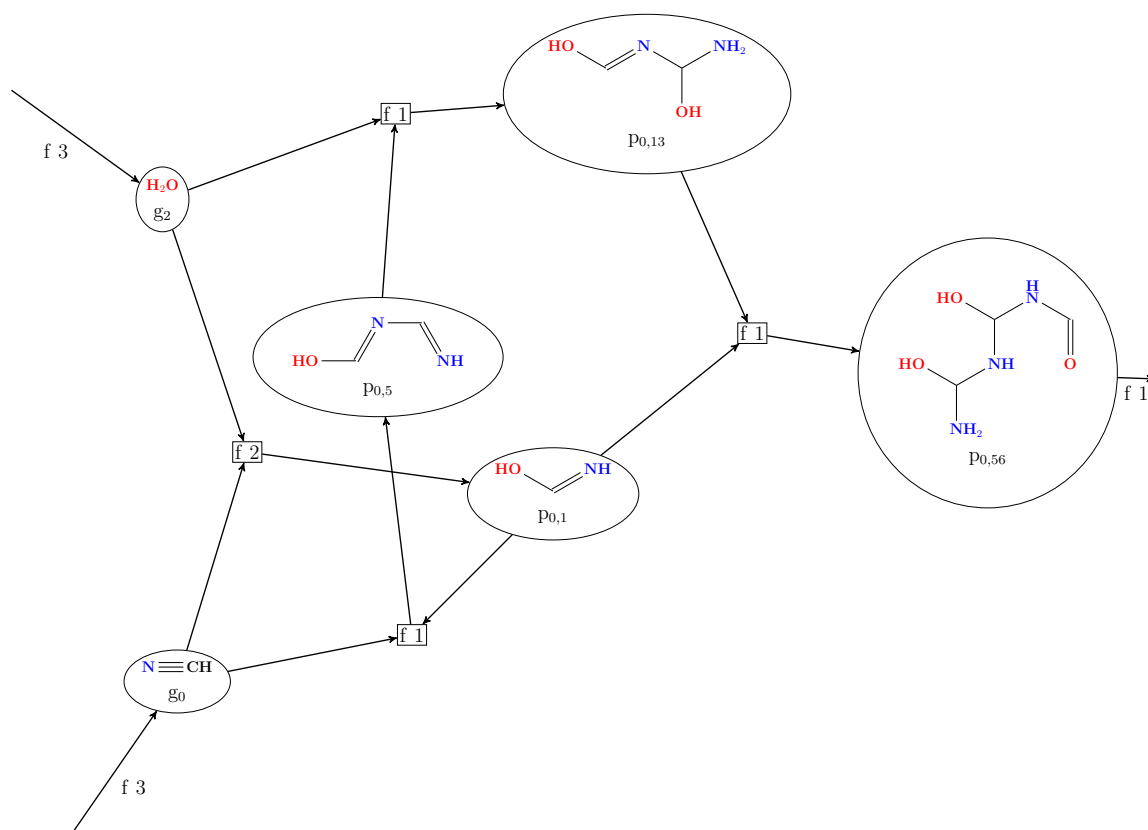
$$|U| = 5$$

0.3.2 Solution 1

Overall Data

Objective value (non-integral): -0.113647						
Vertex/Graph	In	Out	G	logK	t_order	
$g_{\{0\}}$	3	0	-5.507152	0.000000	0	
$g_{\{2\}}$	3	0	-5.068043	0.000000	0	
$p_{\{0,13\}}$	0	0	-21.240678	0.000000	3	
$p_{\{0,1\}}$	0	0	-10.610101	1.000000	1	
$p_{\{0,56\}}$	0	1	-31.869324	0.000000	67	
$p_{\{0,5\}}$	0	0	-16.158998	0.000000	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	0.0	-14459.025578	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	0.0	-42425.44262	2
$p_{0,13}$	0	0	-55767.391129	0.0	-55767.391129	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	$g_0, g_2,$	$p_{0,1},$	2	-89.152177	-89.152177
14	$g_0, p_{0,1},$	$p_{0,5},$	1	-112.094327	-112.094327
123	$g_2, p_{0,5},$	$p_{0,13},$	1	-35.803547	-35.803547
263	$p_{0,1}, p_{0,13},$	$p_{0,56},$	1	-51.184947	-51.184947
Sum				-298.3791279481965	

$$\Delta G = -37.73871678946505$$

$$\Delta E = -0.1136466078537694$$

$$|E| = 5$$

$$|U| = 4$$

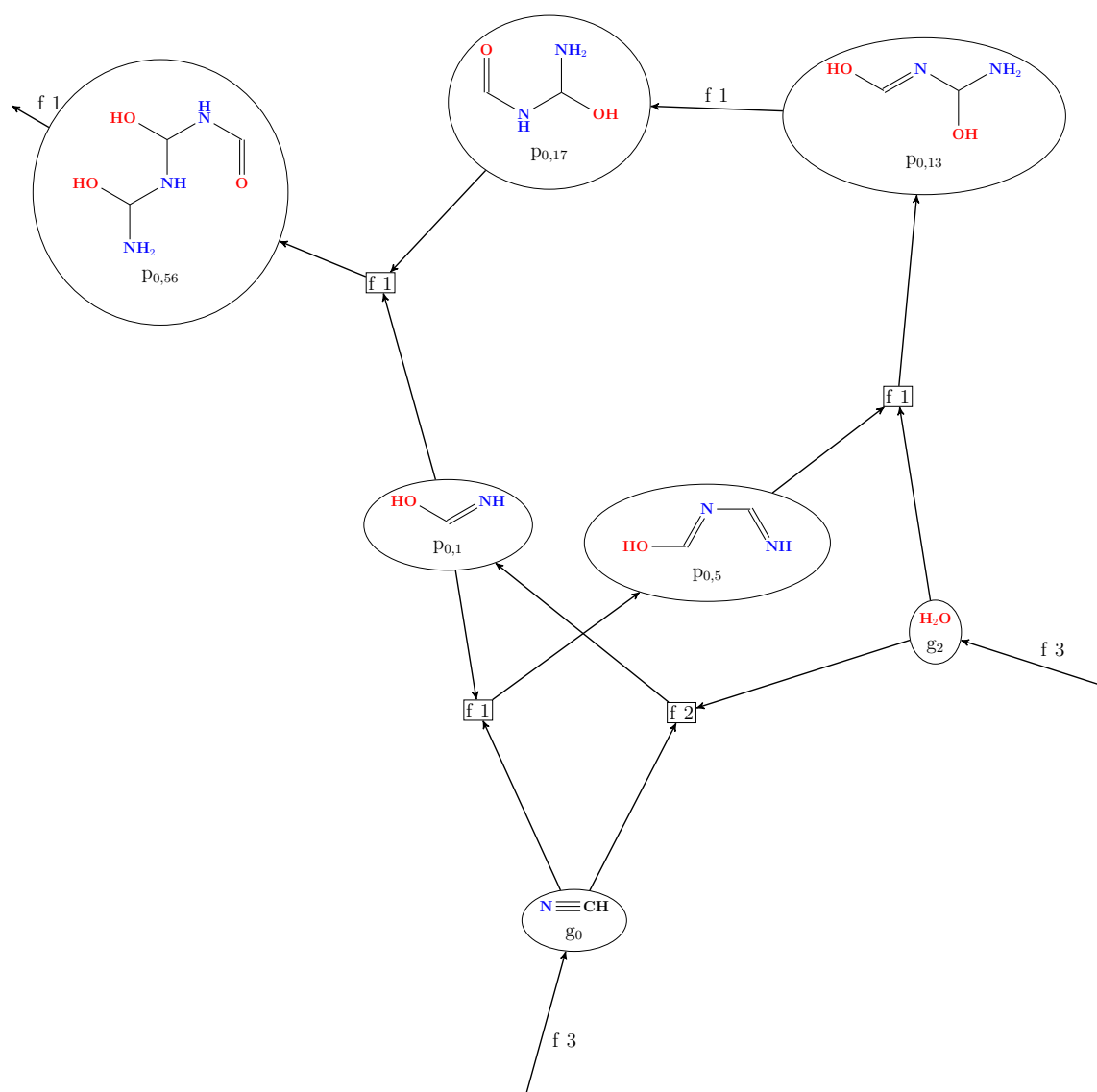
0.3.3 Solution 2

Overall Data

Objective value (non-integral): -0.113647

Vertex/Graph	In	Out	G	logK	t_order
$g_{\{0\}}$	3	0	-5.507141	1.000000	0
$g_{\{2\}}$	3	0	-5.068033	1.000000	0
$p_{\{0,13\}}$	0	0	-21.240678	0.000000	34
$p_{\{0,17\}}$	0	0	-21.248887	0.000000	35
$p_{\{0,1\}}$	0	0	-10.610101	0.000000	31
$p_{\{0,56\}}$	0	1	-31.869324	0.000000	67
$p_{\{0,5\}}$	0	0	-16.158998	0.000000	33

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	-14458.99666	1.0	-14455.670875	0
g_2	3	0	-13306.118349	1.0	-13302.792564	0
$p_{0,1}$	0	0	-27856.817054	0.0	-27856.817054	31
$p_{0,5}$	0	0	-42425.44262	0.0	-42425.44262	33
$p_{0,13}$	0	0	-55767.391129	0.0	-55767.391129	34
$p_{0,17}$	0	0	-55788.944315	0.0	-55788.944315	35
$p_{0,56}$	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	-96.690723	-96.690723
14	$g_0, p_{0,1},$	$p_{0,5},$	1	-112.123245	-112.123245
123	$g_2, p_{0,5},$	$p_{0,13},$	1	-38.324498	-38.324498
196	$p_{0,1}, p_{0,17},$	$p_{0,56},$	1	-27.137423	-27.137423
250	$p_{0,13},$	$p_{0,17},$	1	-21.553186	-21.553186
Sum					-298.3791279481946

$$\Delta G = -39.25197890472174$$

$$\Delta E = -0.11364660785376868$$

$$|E| = 6$$

$$|U| = 5$$

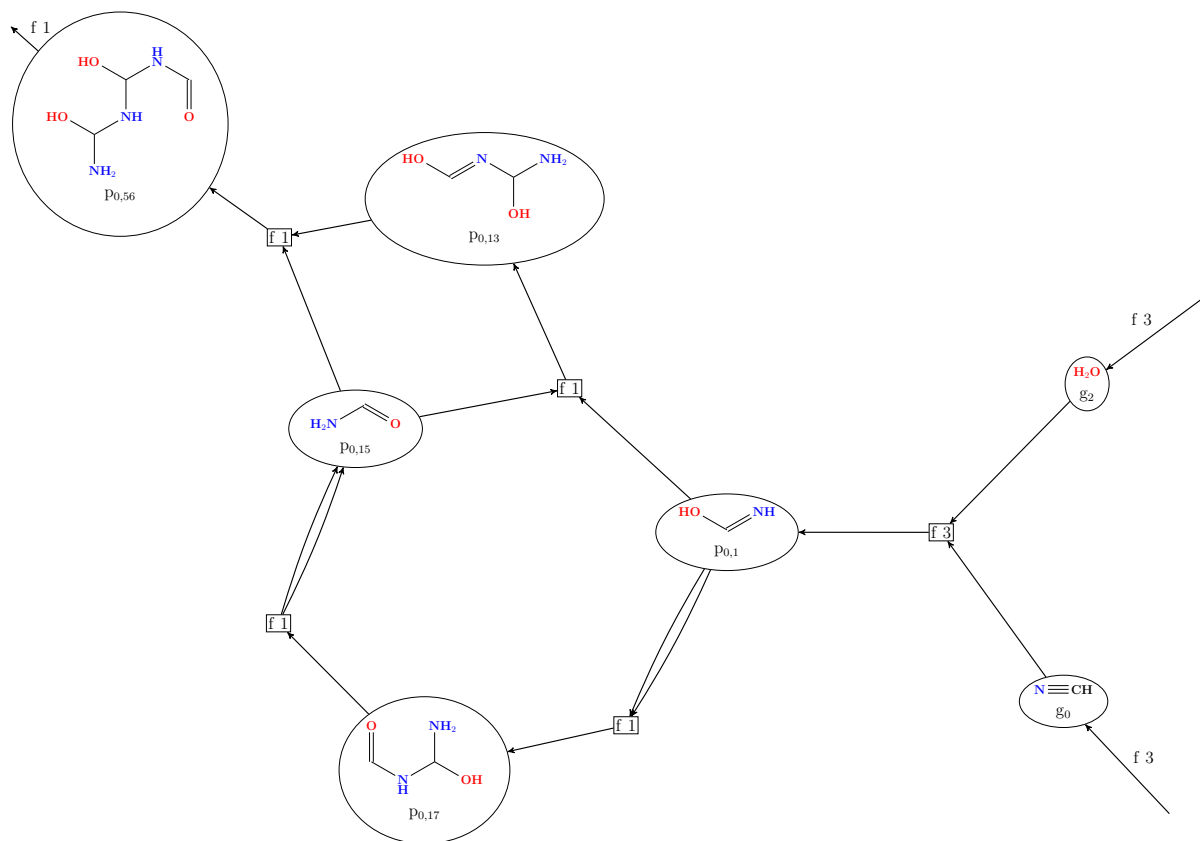
0.3.4 Solution 3

Overall Data

Objective value (non-integral): -0.0777903

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	38
$p_{\{0,15\}}$	0	0	-10.625195	0.000000	26
$p_{\{0,17\}}$	0	0	-21.248887	1.000000	25
$p_{\{0,1\}}$	0	0	-10.610101	0.000000	1
$p_{\{0,56\}}$	0	1	-31.869260	1.000000	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	0.0	-13306.144961	0
$p_{0,1}$	0	0	-27856.817054	0.0	-27856.817054	1
$p_{0,13}$	0	0	-55767.391129	0.0	-55767.391129	38
$p_{0,15}$	0	0	-27896.445756	0.0	-27896.445756	26
$p_{0,17}$	0	0	-55788.944315	1.0	-55785.61853	25
$p_{0,56}$	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	-94.140854	-94.140854
40	$p_{0,1}, p_{0,1},$	$p_{0,17},$	1	-72.815867	-72.815867
169	$p_{0,13}, p_{0,15},$	$p_{0,56},$	1	-6.400223	-6.400223
192	$p_{0,1}, p_{0,15},$	$p_{0,13},$	1	-14.128319	-14.128319
237	$p_{0,17},$	$p_{0,15}, p_{0,15},$	1	-6.441535	-6.441535
Sum					-204.23845691552773

$$\Delta G = -38.22084989066103$$

$$\Delta E = -0.07779031992401214$$

$$|E| = 7$$

$$|U| = 5$$

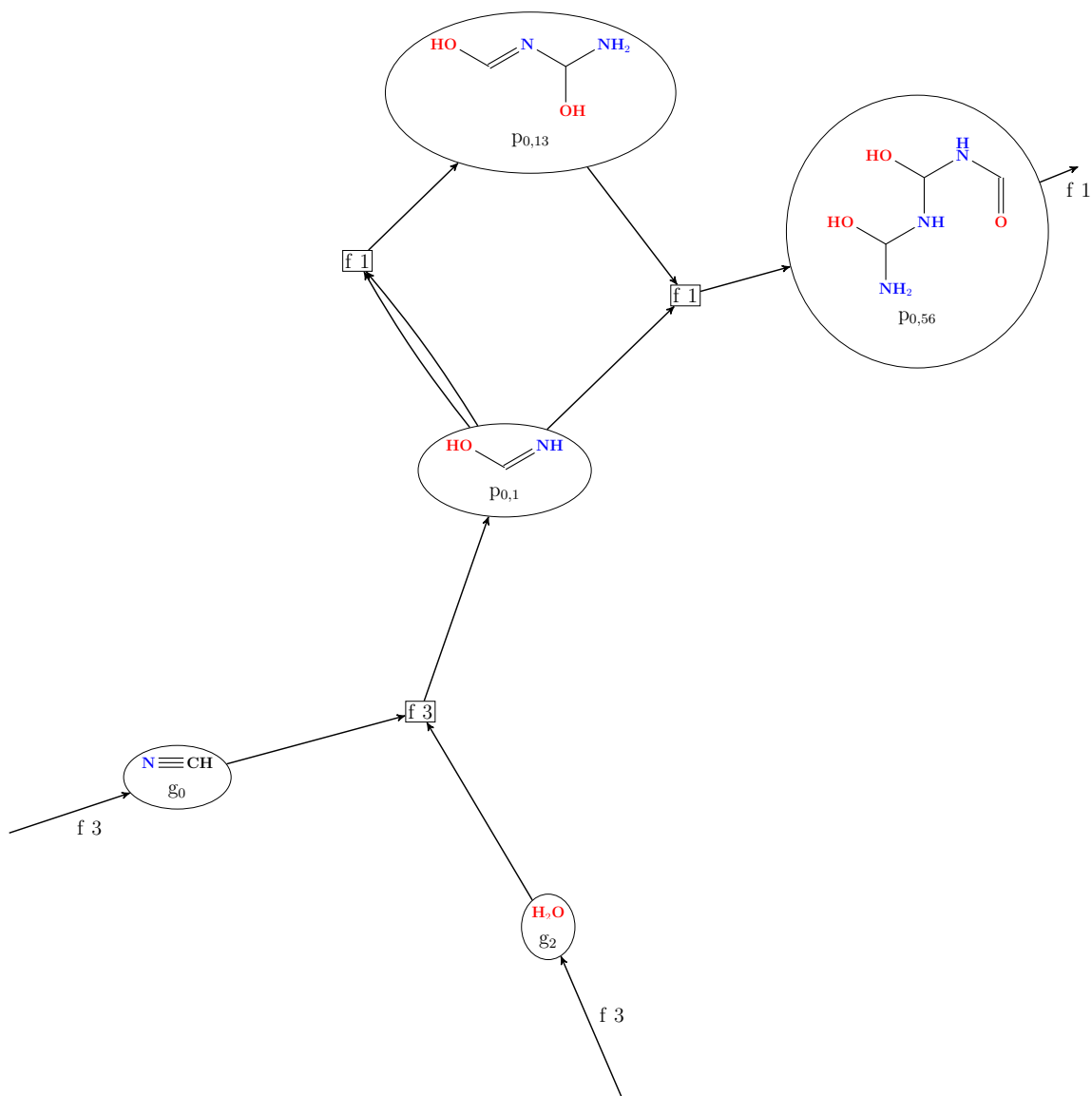
0.3.5 Solution 4

Overall Data

Objective value (non-integral): -0.0777903

Vertex/Graph	In	Out	G	logK	t_order
$g_{\{0\}}$	3	0	-5.507152	0.000000	0
$g_{\{2\}}$	3	0	-5.068043	0.000000	20
$p_{\{0,13\}}$	0	0	-21.240635	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/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	-13306.144961	0.0	-13306.144961	20
$p_{0,1}$	0	0	-27856.761341	1.0	-27853.435556	21
$p_{0,13}$	0	0	-55767.279594	1.0	-55763.953809	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	-89.096463	-89.096463
30	$p_{0,1}, p_{0,1},$	$p_{0,13},$	1	-56.251251	-56.251251
263	$p_{0,1}, p_{0,13},$	$p_{0,56},$	1	-53.846534	-53.846534
Sum					-204.23845691552773

$$\Delta G = -37.73871678946505$$

$$\Delta E = -0.07779031992401214$$

$$|E| = 5$$

$$|U| = 3$$

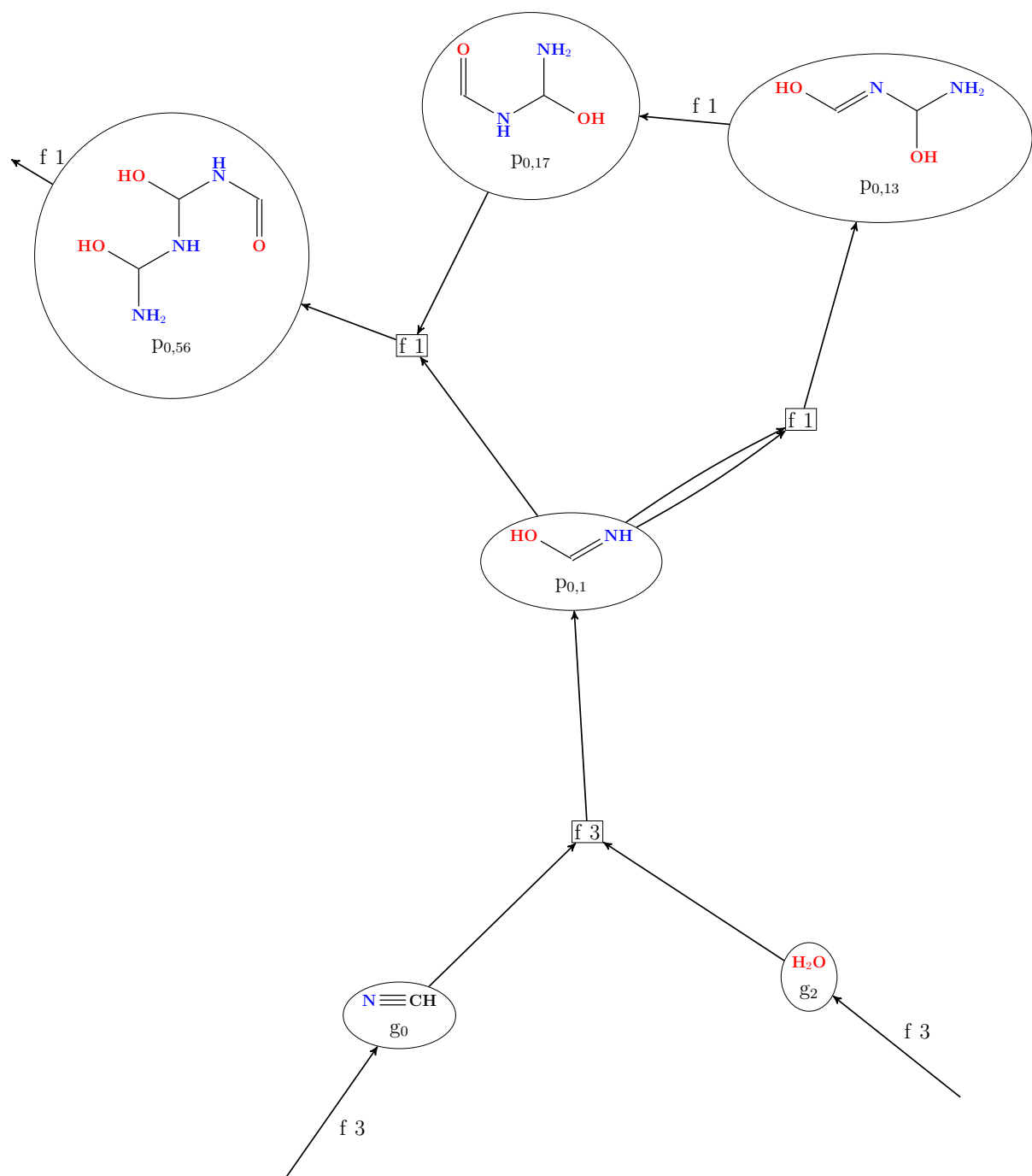
0.3.6 Solution 5

Overall Data

Objective value (non-integral): -0.0777903

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
$p_{\{0,17\}}$	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/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	0.0	-13306.144961	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
$p_{0,17}$	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	-91.590802	-91.590802
30	$p_{0,1}, p_{0,1},$	$p_{0,13},$	1	-56.251251	-56.251251
196	$p_{0,1}, p_{0,17},$	$p_{0,56},$	1	-32.293392	-32.293392
250	$p_{0,13},$	$p_{0,17},$	1	-21.553143	-21.553143
Sum					-204.23845691552773

$$\Delta G = -38.48701884331209$$

$$\Delta E = -0.07779031992401214$$

$$|E| = 6$$

$$|U| = 4$$

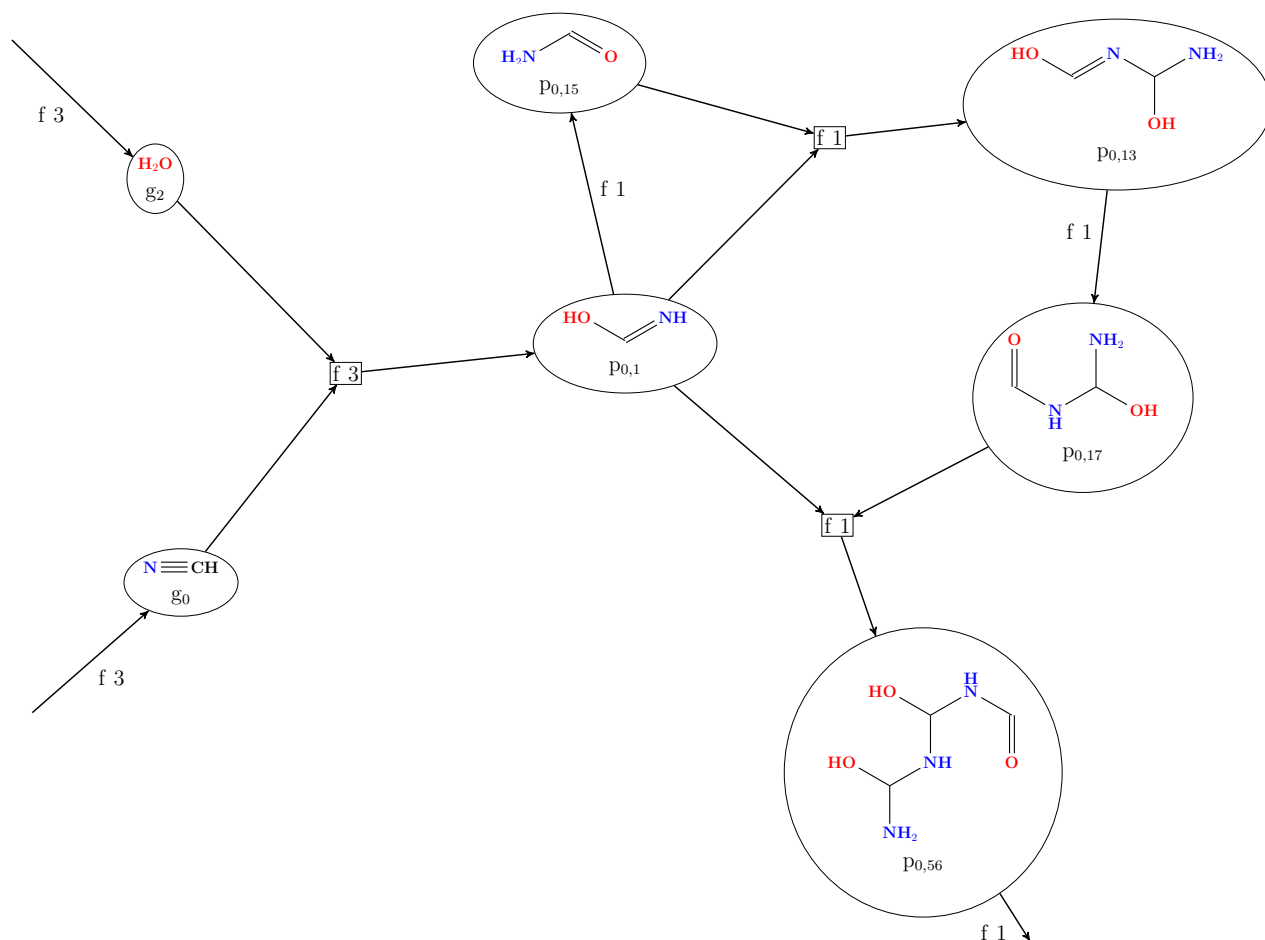
0.3.7 Solution 6

Overall Data

Objective value (non-integral): -0.0777903

Vertex/Graph	In	Out	G	logK	t_order
$g_{\{0\}}$	3	0	-5.507152	0.000000	0
$g_{\{2\}}$	3	0	-5.068043	0.000000	0
$p_{\{0,13\}}$	0	0	-21.240635	1.000000	64
$p_{\{0,15\}}$	0	0	-10.625195	0.000000	62
$p_{\{0,17\}}$	0	0	-21.248887	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/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	0.0	-14459.025578	0
g_2	3	0	-13306.144961	0.0	-13306.144961	0
$p_{0,1}$	0	0	-27856.761341	1.0	-27853.435556	1
$p_{0,13}$	0	0	-55767.279594	1.0	-55763.953809	64
$p_{0,15}$	0	0	-27896.445756	0.0	-27896.445756	62
$p_{0,17}$	0	0	-55788.944315	1.0	-55785.61853	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	-89.096463	-89.096463
36	$p_{0,1},$	$p_{0,15},$	1	-42.178754	-42.178754
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	-32.181814	-32.181814
250	$p_{0,13},$	$p_{0,17},$	1	-21.664721	-21.664721
Sum					-204.23845691552773

$$\Delta G = -37.738716526915084$$

$$\Delta E = -0.07779031992401214$$

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

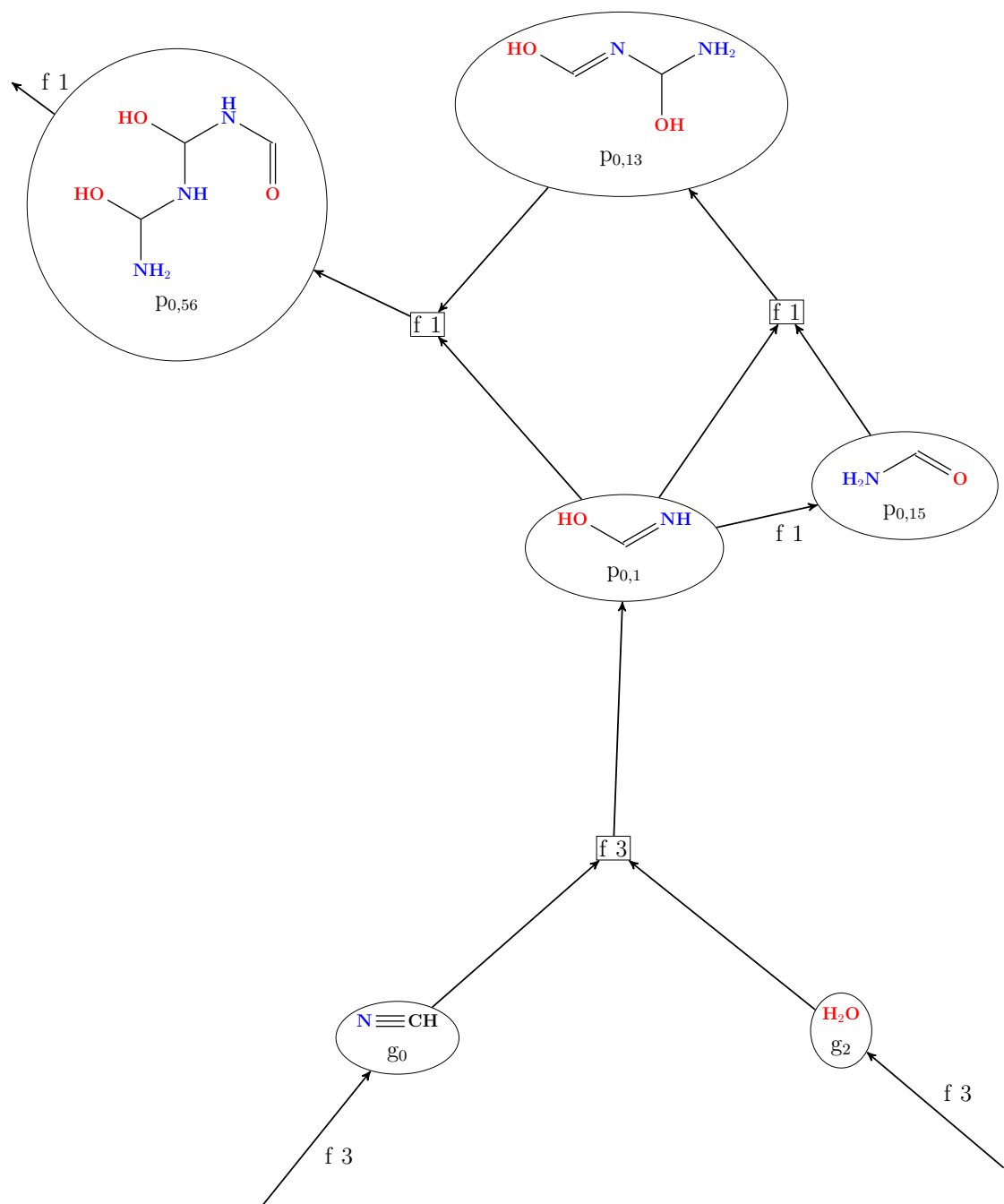
0.3.8 Solution 7

Overall Data

Objective value (non-integral): -0.0777903

Vertex/Graph	In	Out	G	logK	t_order
$g_{\{0\}}$	3	0	-5.507152	0.000000	0
$g_{\{2\}}$	3	0	-5.068043	0.000000	0
$p_{\{0,13\}}$	0	0	-21.240678	0.000000	65
$p_{\{0,15\}}$	0	0	-10.625174	0.000000	63
$p_{\{0,1\}}$	0	0	-10.610101	1.000000	1
$p_{\{0,56\}}$	0	1	-31.869260	1.000000	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	-13306.144961	0.0	-13306.144961	0
$p_{0,1}$	0	0	-27856.817054	1.0	-27853.491269	1
$p_{0,13}$	0	0	-55767.391129	0.0	-55767.391129	65
$p_{0,15}$	0	0	-27896.389963	0.0	-27896.389963	63
$p_{0,56}$	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	-89.152177	-89.152177
36	$p_{0,1},$	$p_{0,15},$	1	-42.067247	-42.067247
192	$p_{0,1}, p_{0,15},$	$p_{0,13},$	1	-16.67845	-16.67845
263	$p_{0,1}, p_{0,13},$	$p_{0,56},$	1	-48.523263	-48.523263
Sum					-204.23845691552773

$$\Delta G = -37.47254809936395$$

$$\Delta E = -0.07779031992401214$$

$$|E| = 6$$

$$|U| = 4$$

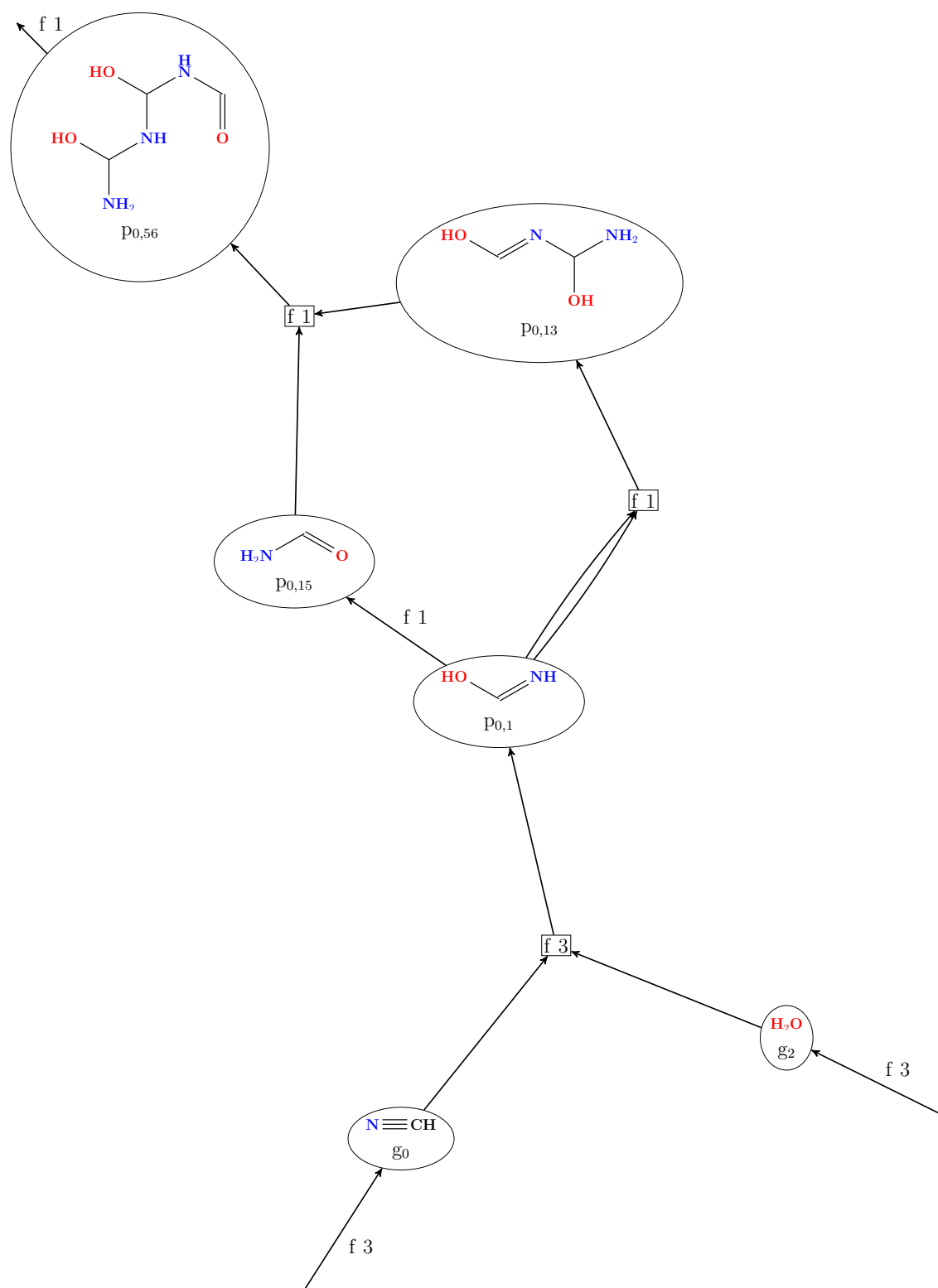
0.3.9 Solution 8

Overall Data

Objective value (non-integral): -0.0777903

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	43
$p_{\{0,15\}}$	0	0	-10.625195	1.000000	23
$p_{\{0,1\}}$	0	0	-10.610101	1.000000	21
$p_{\{0,56\}}$	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	-13306.144961	0.0	-13306.144961	0
$p_{0,1}$	0	0	-27856.817054	1.0	-27853.491269	21
$p_{0,13}$	0	0	-55767.391129	0.0	-55767.391129	43
$p_{0,15}$	0	0	-27896.445756	1.0	-27893.119971	23
$p_{0,56}$	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	-91.646516	-91.646516
30	$p_{0,1}, p_{0,1},$	$p_{0,13},$	1	-58.745698	-58.745698
36	$p_{0,1},$	$p_{0,15},$	1	-39.628701	-39.628701
169	$p_{0,13}, p_{0,15},$	$p_{0,56},$	1	-11.556246	-11.556246
Sum					-204.23845691552773

$\Delta G = -38.487018580762125$

$\Delta E = -0.07779031992401214$

$|E| = 6$

$|U| = 4$

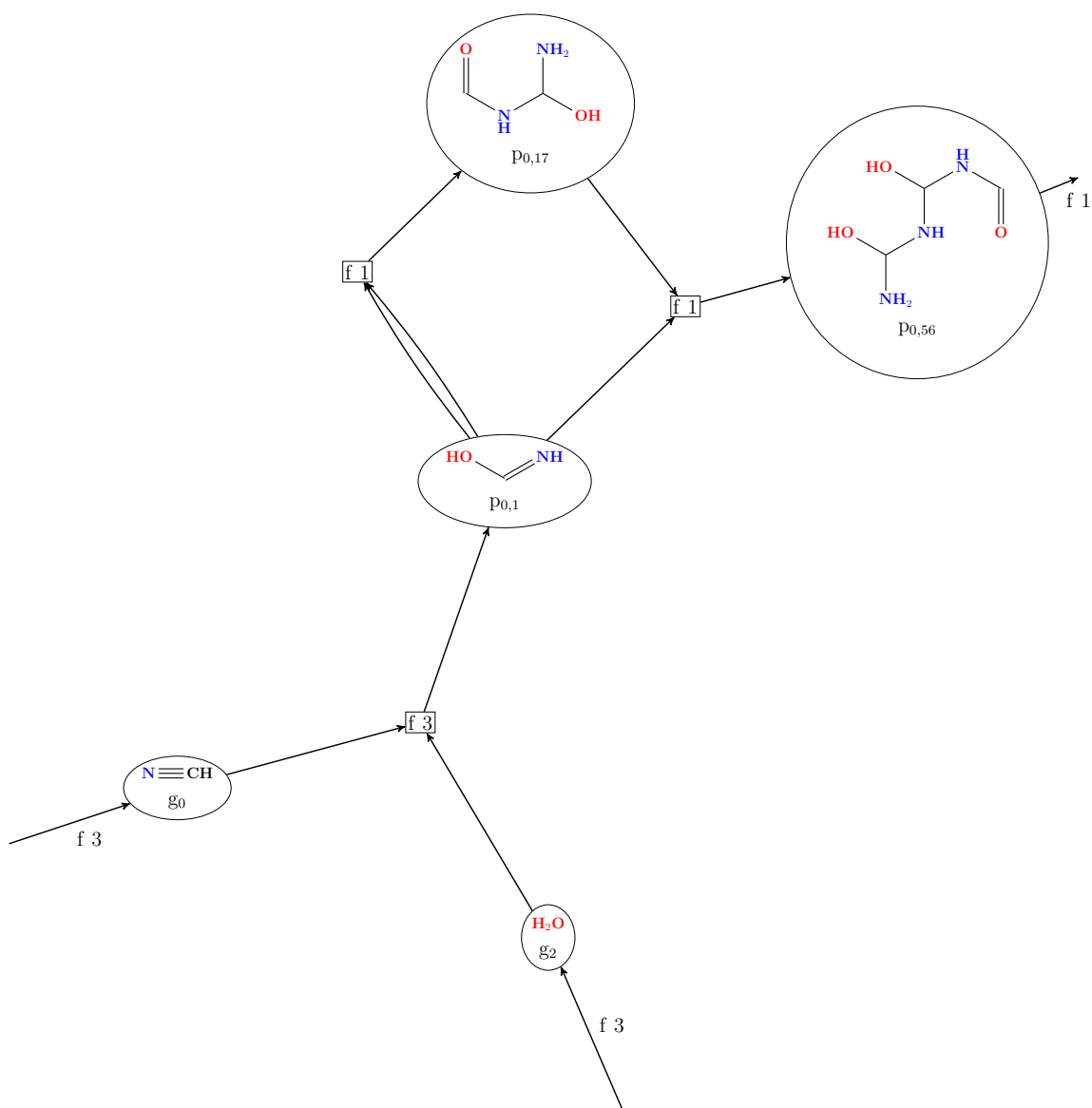
0.3.10 Solution 9

Overall Data

Objective value (non-integral): -0.0777903

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
$p_{\{0,17\}}$	0	0	-21.248844	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/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	-13306.144961	0.0	-13306.144961	0
$p_{0,1}$	0	0	-27856.761341	1.0	-27853.435556	1
$p_{0,17}$	0	0	-55788.832737	1.0	-55785.506952	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	-91.590802	-91.590802
40	$p_{0,1}, p_{0,1},$	$p_{0,17},$	1	-77.804394	-77.804394
196	$p_{0,1}, p_{0,17},$	$p_{0,56},$	1	-32.293392	-32.293392
Sum					-204.23845691552773

$$\Delta G = -38.48701884331209$$

$$\Delta E = -0.07779031992401214$$

$|E| = 5$
 $|U| = 3$

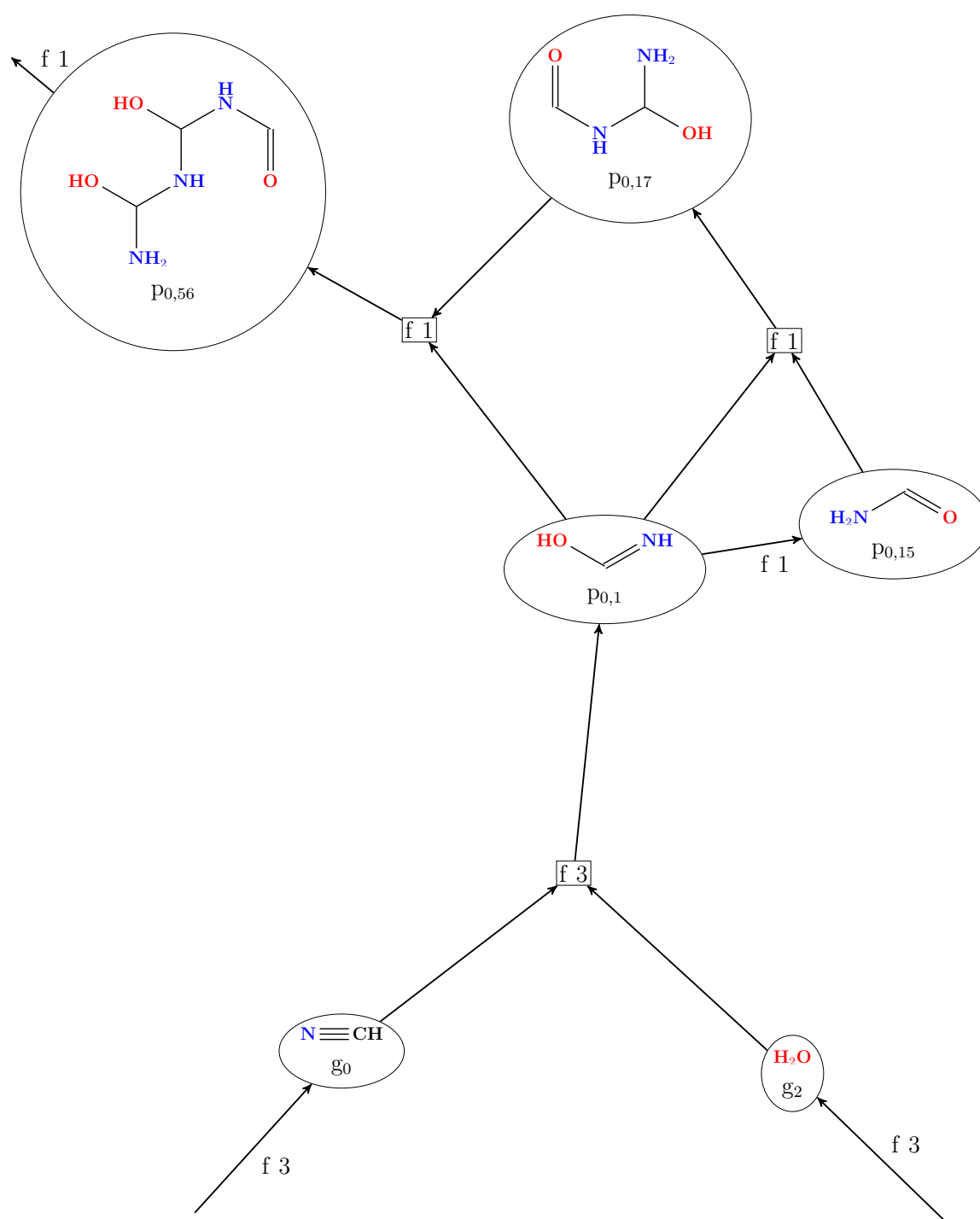
0.3.11 Solution 10

Overall Data

Objective value (non-integral): -0.0777903

Vertex/Graph	In	Out	G	logK	t_order
$g_{\{0\}}$	3	0	-5.507152	0.000000	0
$g_{\{2\}}$	3	0	-5.068043	0.000000	0
$p_{\{0,15\}}$	0	0	-10.625195	1.000000	63
$p_{\{0,17\}}$	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/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	0.0	-14459.025578	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	1.0	-27893.119971	63
$p_{0,17}$	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	-89.096463	-89.096463
36	$p_{0,1},$	$p_{0,15},$	1	-39.684415	-39.684415
183	$p_{0,1}, p_{0,15},$	$p_{0,17},$	1	-38.119979	-38.119979
196	$p_{0,1}, p_{0,17},$	$p_{0,56},$	1	-32.293392	-32.293392
Sum					-204.23845691552773

$$\Delta G = -37.73871678946505$$

$$\Delta E = -0.07779031992401214$$

$$|E| = 6$$

$$|U| = 4$$

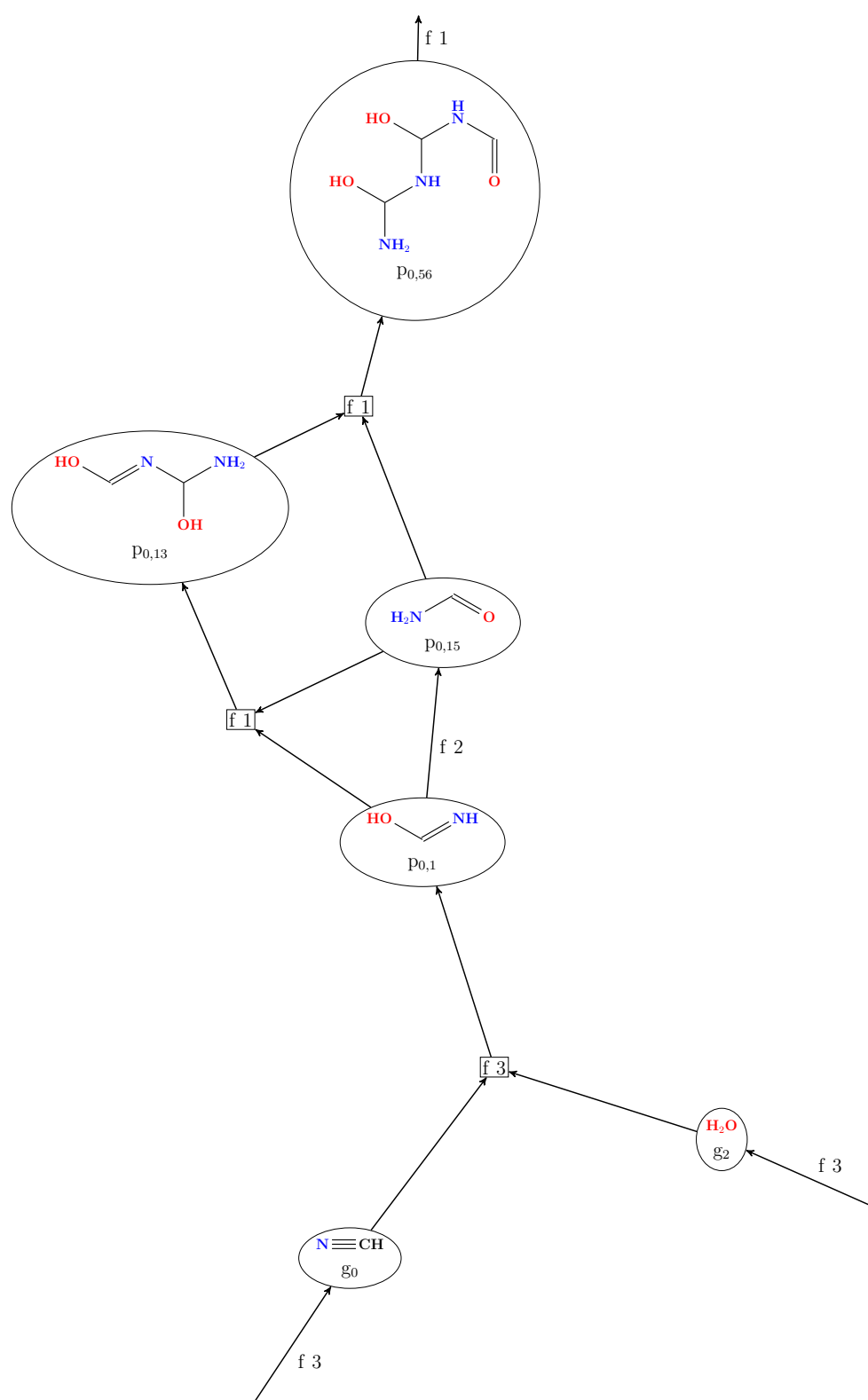
0.3.12 Solution 11

Overall Data

Objective value (non-integral): -0.0626966

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
$p_{\{0,15\}}$	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/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
$p_{0,13}$	0	0	-55767.391129	0.0	-55767.391129	64
$p_{0,15}$	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	-94.085141	-94.085141
36	$p_{0,1},$	$p_{0,15},$	2	-39.628622	-39.628622
169	$p_{0,13}, p_{0,15},$	$p_{0,56},$	1	-11.612039	-11.612039
192	$p_{0,1}, p_{0,15},$	$p_{0,13},$	1	-19.228503	-19.228503
Sum					-164.60983481173264

$\Delta G = -39.23532010950924$

$\Delta E = -0.06269657490577102$

$|E| = 7$

$|U| = 4$

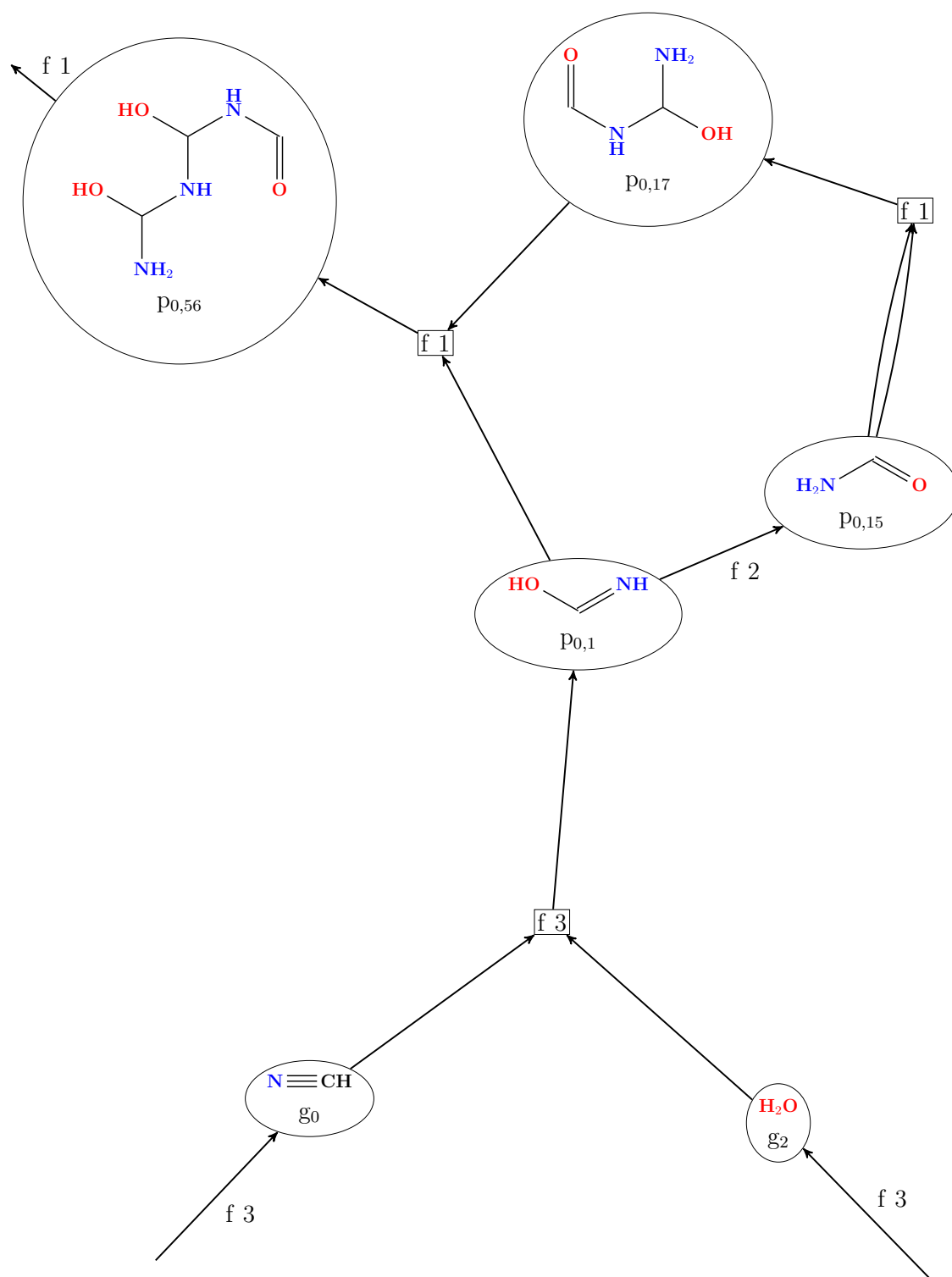
0.3.13 Solution 12

Overall Data

Objective value (non-integral): -0.0626966

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	2
$p_{\{0,17\}}$	0	0	-21.248844	0.417541	5
$p_{\{0,1\}}$	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
$p_{0,15}$	0	0	-27896.389963	1.0	-27893.064178	2
$p_{0,17}$	0	0	-55788.832737	0.417541	-55787.444085	5
$p_{0,56}$	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	-94.085141	-94.085141
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	-30.840542	-30.840542
Sum					-164.60983481173074

$$\Delta G = -39.23532010950924$$

$$\Delta E = -0.0626965749057703$$

$$|E| = 7$$

$$|U| = 4$$