

Annex 5E

Main Risk Contributor to Potential Loss of Life

Table 5E.1 2016 Main Risk Contributor to PLL

Ranking	Event	Description	PLL	Percentage
1	FG_01_LR_IF_FB	Fireball of a line rupture scenario for manifold extending from Yacheng fuel gas manifold to blending station	4.99E-07	13.3%
2	FG_02_LR_IF_FB	Fireball of a line rupture scenario for manifold extending from Dachan fuel gas manifold to blending station	4.88E-07	13.0%
3	FG_127_LR_IF_FB	Fireball of a line rupture scenario for interconnecting gas pipeline from BPPS to CPPS	3.76E-07	10.1%
4	FG_101_LR_IF_FB	Fireball of a line rupture scenario for Yacheng manifold	3.61E-07	9.6%
5	FG_102_LR_IF_FB	Fireball of a line rupture scenario for Dachan manifold	2.85E-07	7.6%
6	GRS_05_LR_IF_FB	Fireball of a line rupture scenario for piping from gas heaters to pressure reduction station, including Pressure Reduction Station of Yacheng GRS	2.54E-07	6.8%
7	GRS_01_LR_IF_FB	Fireball of a line rupture scenario for above ground piping from shore end to pig receiver of Yacheng GRS	2.10E-07	5.6%
8	GRS_04_LR_IF_FB	Fireball of a line rupture scenario for piping from inlet gas filter separator to gas heater of Yacheng GRS	1.93E-07	5.2%
9	GRS_18_LR_IF_FB	Fireball of a line rupture scenario for piping from Pressure Reduction Station to manifold, including HIPPS of Dachan GRS	1.60E-07	4.3%
10	GRS_06_LR_IF_FB	Fireball of a line rupture scenario for piping from pressure reduction station to outlet gas filter separator of Yacheng GRS	1.12E-07	3.0%
	Other		8.03E-07	21.5%
	Total		3.74E-06	100.0%

Table 5E.2 2019 Main Risk Contributor to PLL

Ranking	Event	Description	PLL	Percentage
1	FG_01_LR_IF_FB	Fireball of a line rupture scenario for manifold extending from Yacheng fuel gas manifold to blending station	5.13E-07	12.6%
2	FG_02_LR_IF_FB	Fireball of a line rupture scenario for manifold extending from Dachan fuel gas manifold to blending station	5.01E-07	12.3%
3	FG_127_LR_IF_FB	Fireball of a line rupture scenario for interconnecting gas pipeline from BPPS to CPPS	3.80E-07	9.3%
4	FG_101_LR_IF_FB	Fireball of a line rupture scenario for Yacheng manifold	3.71E-07	9.1%
5	FG_102_LR_IF_FB	Fireball of a line rupture scenario for Dachan manifold	2.93E-07	7.2%
6	GRS_05_LR_IF_FB	Fireball of a line rupture scenario for piping from gas heaters to pressure reduction station, including Pressure Reduction Station of Yacheng GRS	2.66E-07	6.5%
7	GRS_01_LR_IF_FB	Fireball of a line rupture scenario for above ground piping from shore end to pig receiver of Yacheng GRS	2.24E-07	5.5%
8	GRS_04_LR_IF_FB	Fireball of a line rupture scenario for piping from inlet gas filter separator to gas heater of Yacheng GRS	2.03E-07	5.0%
9	GRS_18_LR_IF_FB	Fireball of a line rupture scenario for piping from Pressure Reduction Station to manifold, including HIPPS of Dachan GRS	1.68E-07	4.1%
10	GRS_06_LR_IF_FB	Fireball of a line rupture scenario for piping from pressure reduction station to outlet gas filter separator of Yacheng GRS	1.17E-07	2.9%
	Other		1.04E-06	25.6%
	Total		4.08E-06	100.0%

Table 5E.3 2020 Main Risk Contributor to PLL

Ranking	Event	Description	PLL	Percentage
1	FG_01_LR_IF_FB	Fireball of a line rupture scenario for manifold extending from Yacheng fuel gas manifold to blending station	5.24E-07	12.8%
2	FG_02_LR_IF_FB	Fireball of a line rupture scenario for manifold extending from Dachan fuel gas manifold to blending station	5.12E-07	12.6%
3	FG_127_LR_IF_FB	Fireball of a line rupture scenario for interconnecting gas pipeline from BPPS to CPPS	3.83E-07	9.4%
4	FG_101_LR_IF_FB	Fireball of a line rupture scenario for Yacheng manifold	3.79E-07	9.3%
5	FG_102_LR_IF_FB	Fireball of a line rupture scenario for Dachan manifold	2.99E-07	7.3%
6	GRS_05_LR_IF_FB	Fireball of a line rupture scenario for piping from gas heaters to pressure reduction station, including Pressure Reduction Station of Yacheng GRS	2.71E-07	6.6%
7	GRS_01_LR_IF_FB	Fireball of a line rupture scenario for above ground piping from shore end to pig receiver of Yacheng GRS	2.27E-07	5.6%
8	GRS_04_LR_IF_FB	Fireball of a line rupture scenario for piping from inlet gas filter separator to gas heater of Yacheng GRS	2.07E-07	5.1%
9	GRS_18_LR_IF_FB	Fireball of a line rupture scenario for piping from Pressure Reduction Station to manifold, including HIPPS of Dachan GRS	1.72E-07	4.2%
10	GRS_06_LR_IF_FB	Fireball of a line rupture scenario for piping from pressure reduction station to outlet gas filter separator of Yacheng GRS	1.20E-07	2.9%
	Other		9.86E-07	24.2%
	Total		4.08E-06	100.0%

Table 5E.4 2034 Main Risk Contributor to PLL

Ranking	Event	Description	PLL	Percentage
1	FG_01_LR_IF_FB	Fireball of a line rupture scenario for manifold extending from Yacheng fuel gas manifold to blending station	6.09E-07	12.9%
2	FG_02_LR_IF_FB	Fireball of a line rupture scenario for manifold extending from Dachan fuel gas manifold to blending station	5.96E-07	12.6%
3	FG_101_LR_IF_FB	Fireball of a line rupture scenario for Yacheng manifold	4.36E-07	9.2%
4	FG_127_LR_IF_FB	Fireball of a line rupture scenario for interconnecting gas pipeline from BPPS to CPPS	4.01E-07	8.5%
5	FG_102_LR_IF_FB	Fireball of a line rupture scenario for Dachan manifold	3.45E-07	7.3%
6	GRS_05_LR_IF_FB	Fireball of a line rupture scenario for piping from gas heaters to pressure reduction station, including Pressure Reduction Station of Yacheng GRS	3.07E-07	6.5%
7	GRS_01_LR_IF_FB	Fireball of a line rupture scenario for above ground piping from shore end to pig receiver of Yacheng GRS	2.54E-07	5.4%
8	GRS_04_LR_IF_FB	Fireball of a line rupture scenario for piping from inlet gas filter separator to gas heater of Yacheng GRS	2.33E-07	4.9%
9	GRS_18_LR_IF_FB	Fireball of a line rupture scenario for piping from Pressure Reduction Station to manifold, including HIPPS of Dachan GRS	1.93E-07	4.1%
10	GRS_06_LR_IF_FB	Fireball of a line rupture scenario for piping from pressure reduction station to outlet gas filter separator of Yacheng GRS	1.36E-07	2.9%
	Other		1.22E-06	25.8%
	Total		4.73E-06	100.0%

Table 5E.5 2035 Main Risk Contributor to PLL

Ranking	Event	Description	PLL	Percentage
1	FG_01_LR_IF_FB	Fireball of a line rupture scenario for manifold extending from Yacheng fuel gas manifold to blending station	6.26E-07	12.4%
2	FG_02_LR_IF_FB	Fireball of a line rupture scenario for manifold extending from Dachan fuel gas manifold to blending station	6.12E-07	12.2%
3	FG_101_LR_IF_FB	Fireball of a line rupture scenario for Yacheng manifold	4.47E-07	8.9%
4	FG_127_LR_IF_FB	Fireball of a line rupture scenario for interconnecting gas pipeline from BPPS to CPPS	4.05E-07	8.0%
5	FG_102_LR_IF_FB	Fireball of a line rupture scenario for Dachan manifold	3.54E-07	7.0%
6	GRS_05_LR_IF_FB	Fireball of a line rupture scenario for piping from gas heaters to pressure reduction station, including Pressure Reduction Station of Yacheng GRS	3.13E-07	6.2%
7	FG_07_LR_IF_FB	Fireball of a line rupture scenario for manifold for 2 nd CCGT	2.95E-07	5.9%
8	GRS_01_LR_IF_FB	Fireball of a line rupture scenario for above ground piping from shore end to pig receiver of Yacheng GRS	2.59E-07	5.2%
9	GRS_04_LR_IF_FB	Fireball of a line rupture scenario for piping from inlet gas filter separator to gas heater of Yacheng GRS	2.38E-07	4.7%
10	GRS_18_LR_IF_FB	Fireball of a line rupture scenario for piping from Pressure Reduction Station to manifold, including HIPPS of Dachan GRS	1.97E-07	3.9%
	Other		1.29E-06	25.6%
	Total		5.03E-06	100.0%