

	Total	Financial year ending June				
		2016	2017	2018	2019	2020
Real costs (P50 values)						
Investigation	550,000	275,000	275,000	-	-	-
Design & prep work	1,399,201	-	-	932,801	466,400	-
Construction - labour	5,176,063	-	-	-	5,176,063	-
Construction - Material & plant	1,886,197	-	-	-	1,886,197	-
Total real costs (unrisked)	9,011,461	275,000	275,000	932,801	7,528,660	-
Other cost allowances (Category 2)	1,450,310	-	-	-	1,450,310	-
Total real P50 costs (unrisked)	10,461,771	275,000	275,000	932,801	8,978,970	-
<i>Category 2 P50 calculated as average of minimum and maximum cost</i>						
USD costs \$	-	-	-	-	460,609	-
P50 cost summary						
Real P50 costs	10,461,771	275,000	275,000	932,801	8,978,970	-
Inflation @ 50th percentile	461,431	-	-	21,801	439,630	-
Nominal P50 costs	10,923,202	275,000	275,000	954,602	9,418,601	-
<i>PV: Nominal P50 costs</i>	9,074,630					
IDC @ 50th percentile	368,533	4,743	32,472	68,823	262,496	-
Nominal P50 costs incl IDC	11,291,736	279,743	307,472	1,023,424	9,681,096	-
Real cost uplift in LPCA @ selected risk percentile						
Design & prep work	77,346	-	-	51,564	25,782	-
Construction - labour	286,126	-	-	-	286,126	-
Construction - Material & plant	104,266	-	-	-	104,266	-
Exchange rate	86,020	-	-	-	86,020	-
Other cost allowances	484,730	-	-	-	484,730	-
Subtotal	1,038,488	-	-	51,564	986,924	-

LPCA cost summary

Real costs @ selected risk percentile	11,500,259	275,000	275,000	984,365	9,965,894	-
Inflation @ selected risk percentile	511,226	-	-	23,006	488,219	-
Nominal costs @ selected risk percentile	12,011,485	275,000	275,000	1,007,371	10,454,114	-
<i>PV: Nominal costs @ selected risk percent</i>	<i>9,963,631</i>					
IDC @ selected risk percentile	391,095	4,743	32,472	70,587	283,292	-
Cost of hedging (NZD)	22,818	-	-	11,409	11,409	-
Cost for approval:	12,425,397	279,743	307,472	1,089,367	10,748,815	-

Assumptions

Inflation from RCP2	1.8%	2.1%	2.1%	2.0%	2.0%
Discount rate (real, pretax)	7.0%	7.0%	7.0%	7.0%	7.0%
Nominal interest rates	7.1%	6.9%	6.9%	6.6%	6.5%
NZD:USD from RCP2	0.79	0.77	0.76	0.74	0.72
% of (materials) capex in USD	33%				

Although we will hedge most of our USD capex, this will not be done until project is approved. We are therefore exposed to exchange rate movements from now

Key dates

	Investigation	Design	Construction
start	Jan-16	Jul-17	Jan-19
finish	Dec-16	Dec-18	May-19
Base quarter for cost inflation	Dec-16		
Base quarter for PV	Dec-16		

Risk percentiles for LPCA request:

SSR+ costs	90% Triangle distribution
Other construction costs	100% Undefined distribution