

IceCube Upgrade Cost Uncertainty calculated values, based on Replan Y2

WBS	Planned					Cost Uncertainty					total
	Y2	Y3	Y4	Y5		Y2	Y3	Y4	Y5		
1.1.1.1	\$625,249	\$529,920	\$602,042	\$572,197	0.05	\$31,262	\$29,604	\$31,686	\$30,275	\$92,687	
1.1.2.1	\$154,975	\$144,558	\$156,511	\$158,800	0.06	\$9,299	\$9,691	\$9,885	\$10,083	\$29,658	
1.1.3.1	\$166,005	\$157,192	\$173,505	\$176,043	0.05	\$8,300	\$8,782	\$9,132	\$9,314	\$27,228	
1.1.4.1	\$92,698	\$88,223	\$95,502	\$96,885	0.10	\$9,270	\$9,857	\$10,053	\$10,252	\$30,181	
1.1.5.1	\$278,961	\$204,110	\$227,237	\$230,547	0.10	\$27,896	\$22,806	\$23,920	\$24,397	\$71,140	
1.2.1.1	\$222,653	\$202,632	\$219,300	\$126,113	0.07	\$15,586	\$15,848	\$16,159	\$9,342	\$41,670	
1.2.1.2	\$144,900	\$129,686	\$163,875	\$168,446	0.07	\$10,143	\$10,143	\$12,075	\$12,478	\$34,696	
1.2.1.3	\$13,770	\$9,585	\$13,082	\$4,338	0.07	\$964	\$750	\$964	\$321	\$2,999	
1.2.1.4	\$35,496	\$14,499	\$18,715	\$0	0.07	\$2,485	\$1,134	\$1,379	\$0	\$2,513	
1.2.2.1	\$57,814	\$0	\$0	\$0	0.08	\$4,625	\$0	\$0	\$0	\$3,589	
1.2.2.2	\$28,426	\$0	\$0	\$0	0.08	\$2,274	\$0	\$0	\$0	\$884	
1.2.2.3	\$78,182	\$0	\$0	\$0	0.12	\$9,382	\$0	\$0	\$0	\$2,236	
1.2.3.1	\$142,536	\$10,115	\$0	\$0	0.20	\$28,507	\$2,260	\$0	\$0	\$18,388	
1.2.3.2	\$90,191	\$23,951	\$0	\$0	0.20	\$18,038	\$5,352	\$0	\$0	\$11,060	
1.2.3.3	\$274,588	\$19,473	\$0	\$0	0.18	\$49,426	\$3,916	\$0	\$0	\$29,571	
1.2.3.4	\$0	\$0	\$0	\$0	0.20	\$0	\$0	\$0	\$0	\$0	
1.2.3.5	\$237,729	\$0	\$0	\$0	0.14	\$33,282	\$0	\$0	\$0	\$27,152	
1.2.4.1	\$37,616	\$0	\$0	\$0	0.20	\$7,523	\$0	\$0	\$0	\$0	
1.2.4.2	\$323,333	\$108,664	\$98,325	\$36,406	0.12	\$38,800	\$14,569	\$12,420	\$4,623	\$50,621	
1.2.4.3	\$0	\$331,653	\$98,325	\$36,406	0.12	\$0	\$44,467	\$12,420	\$4,623	\$61,510	
1.2.4.4	\$64,372	\$258,620	\$0	\$0	0.14	\$9,012	\$40,455	\$0	\$0	\$40,455	
1.2.4.5	\$61,785	\$0	\$0	\$0	0.14	\$8,650	\$0	\$0	\$0	\$767	
1.2.4.6	\$83,039	\$41,804	\$0	\$0	0.14	\$11,625	\$6,539	\$0	\$0	\$7,659	
1.2.4.7	\$79,917	\$22,913	\$0	\$0	0.14	\$11,188	\$3,584	\$0	\$0	\$7,387	
1.2.4.8	\$0	\$13,532	\$0	\$0	0.14	\$0	\$2,117	\$0	\$0	\$2,117	
1.2.4.9	\$0	\$0	\$0	\$0	0.14	\$0	\$0	\$0	\$0	\$0	
1.2.5.1	\$1,702	\$0	\$0	\$0	0.16	\$272	\$0	\$0	\$0	\$236	
1.2.5.2	\$161	\$4,519	\$0	\$0	0.16	\$26	\$808	\$0	\$0	\$808	
1.2.5.4	\$93,336	\$0	\$0	\$0	0.18	\$16,800	\$0	\$0	\$0	\$11,422	
1.2.6.1	\$16,558	\$0	\$0	\$0	0.12	\$1,987	\$0	\$0	\$0	\$1,194	
1.2.6.2	\$48,158	\$1,506	\$0	\$0	0.12	\$5,779	\$202	\$0	\$0	\$4,062	
1.2.6.3	\$52,362	\$1,775	\$0	\$0	0.12	\$6,283	\$238	\$0	\$0	\$3,664	
1.2.6.4	\$160,193	\$3,441	\$0	\$0	0.12	\$19,223	\$461	\$0	\$0	\$12,943	
1.2.6.5	\$3,366	\$0	\$0	\$0	0.12	\$404	\$0	\$0	\$0	\$404	
1.2.6.6	\$59,294	\$0	\$0	\$0	0.12	\$7,115	\$0	\$0	\$0	\$2,317	
1.2.7.1	\$18,813	\$0	\$0	\$0	0.12	\$2,258	\$0	\$0	\$0	\$1,285	
1.2.7.2	\$22,648	\$20,373	\$21,798	\$1,279	0.12	\$2,718	\$2,732	\$2,753	\$162	\$7,305	
1.2.7.3	\$29,360	\$0	\$0	\$0	0.12	\$3,523	\$0	\$0	\$0	\$1,604	
1.2.7.4	\$26,370	\$24,681	\$26,733	\$1,868	0.12	\$3,164	\$3,309	\$3,377	\$237	\$7,291	
1.2.7.5	\$0	\$0	\$0	\$0	0.12	\$0	\$0	\$0	\$0	\$1,854	
1.2.8.1	\$59,178	\$108,776	\$257,912	\$0	0.07	\$4,142	\$8,508	\$19,004	\$0	\$27,512	
1.2.8.2	\$0	\$0	\$0	\$0	0.07	\$0	\$0	\$0	\$0	\$0	
1.2.8.3	\$670,498	\$0	\$0	\$0	0.20	\$134,100	\$0	\$0	\$0	\$28,953	
1.2.8.4	\$0	\$253,522	\$0	\$0	0.20	\$0	\$56,653	\$0	\$0	\$56,653	
1.2.8.5	\$0	\$0	\$582,623	\$0	0.07	\$0	\$0	\$42,930	\$0	\$42,930	
1.2.8.6	\$0	\$0	\$0	\$1,068,546	0.14	\$0	\$0	\$0	\$158,303	\$158,303	
1.2.9.1	\$0	\$0	\$0	\$0	0.12	\$0	\$0	\$0	\$0	\$0	
1.2.9.2	\$37,923	\$0	\$0	\$0	0.12	\$4,551	\$0	\$0	\$0	\$0	
1.2.9.3	\$81,939	\$50,736	\$0	\$0	0.12	\$9,833	\$6,803	\$0	\$0	\$12,337	
1.2.9.4	\$0	\$0	\$77,730	\$0	0.12	\$0	\$0	\$9,819	\$0	\$9,819	
1.2.9.5	\$0	\$0	\$0	\$66,487	0.12	\$0	\$0	\$0	\$8,443	\$8,443	
1.3.1.0	\$7,530	\$0	\$0	\$0	0.04	\$301	\$0	\$0	\$0	\$0	
1.3.1.1	\$0	\$9,887	\$0	\$0	0.20	\$0	\$2,209	\$0	\$0	\$2,209	
1.3.1.3	\$74,686	\$0	\$0	\$0	0.20	\$14,937	\$0	\$0	\$0	\$158	
1.3.3.0	\$0	\$0	\$0	\$0	0.04	\$0	\$0	\$0	\$0	\$0	
1.3.3.1	\$83,726	\$0	\$0	\$0	0.16	\$13,396	\$0	\$0	\$0	\$1,601	
1.3.3.2	\$38,807	\$23,270	\$0	\$0	0.14	\$5,433	\$3,640	\$0	\$0	\$7,116	
1.3.3.3	\$124,729	\$51,979	\$0	\$0	0.12	\$14,967	\$6,969	\$0	\$0	\$14,067	
1.3.5.0	\$0	\$0	\$12,655	\$0	0.04	\$0	\$0	\$533	\$0	\$533	
1.4.0.0	\$54,743	\$0	\$9,048	\$0	0.07	\$3,832	\$0	\$667	\$0	\$4,167	
1.4.1.1	\$214,569	\$84,795	\$36,881	\$26,268	0.22	\$47,205	\$20,843	\$8,541	\$6,115	\$44,063	
1.4.1.2	\$67,921	\$27,501	\$0	\$0	0.26	\$17,659	\$7,989	\$0	\$0	\$10,609	
1.4.1.3	\$26,071	\$78,491	\$0	\$0	0.16	\$4,171	\$14,032	\$0	\$0	\$14,156	
1.4.1.4	\$86,955	\$0	\$0	\$0	0.16	\$13,913	\$0	\$0	\$0	\$0	
1.4.2.1	\$44,020	\$8,518	\$5,301	\$0	0.20	\$8,804	\$1,903	\$1,116	\$0	\$10,149	
1.4.2.2	\$58,497	\$0	\$0	\$0	0.24	\$14,039	\$0	\$0	\$0	\$0	
1.4.4.1	\$31,825	\$338,019	\$727	\$0	0.16	\$5,092	\$60,428	\$122	\$0	\$60,921	
1.4.4.2	\$37,828	\$8,169	\$727	\$0	0.40	\$15,131	\$3,651	\$306	\$0	\$4,503	
1.4.4.3	\$0	\$0	\$0	\$0	0.20	\$0	\$0	\$0	\$0	\$0	
1.4.5.1	\$0	\$3,735	\$0	\$0	0.08	\$0	\$334	\$0	\$0	\$334	
1.4.5.2	\$18,961	\$0	\$0	\$0	0.14	\$2,655	\$0	\$0	\$0	\$0	
1.4.5.3	\$24,949	\$0	\$0	\$0	0.08	\$1,996	\$0	\$0	\$0	\$771	
1.4.5.4	\$2,250	\$0	\$0	\$0	0.08	\$180	\$0	\$0	\$0	\$180	
1.5.3.2	\$10,679	\$19,126	\$0	\$0	0.30	\$3,204	\$6,411	\$0	\$0	\$6,411	
1.5.3.3	\$0	\$15,424	\$0	\$0	0.30	\$0	\$5,170	\$0	\$0	\$5,170	
1.5.3.4	\$0	\$2,014	\$0	\$0	0.30	\$0	\$675	\$0	\$0	\$675	
1.5.4.1	\$2,754	\$0	\$1,052	\$0	0.30	\$826	\$0	\$332	\$0	\$332	
1.5.4.2	\$0	\$448	\$0	\$0	0.30	\$0	\$150	\$0	\$0	\$150	
1.6.0.0	\$0	\$0	\$1,744	\$0	0.04	\$0	\$0	\$73	\$0	\$2,417	
1.6.1.1	\$7,874	\$694	\$736	\$732	0.28	\$2,205	\$217	\$217	\$217	\$988	
1.6.1.2	\$57,154	\$13,890	\$105,669	\$107,253	0.28	\$16,003	\$4,346	\$31,145	\$31,779	\$73,156	
1.6.1.3	\$91,247	\$73,081	\$78,432	\$70,852	0.21	\$19,162	\$17,148	\$17,338	\$15,745	\$50,230	
1.6.1.4	\$12,792	\$12,796	\$12,459	\$11,240	0.44	\$5,629	\$6,291	\$5,771	\$5,233	\$17,295	
1.6.2.1	\$0	\$0	\$0	\$0	0.14	\$0	\$0	\$0	\$0	\$0	
1.6.2.3	\$0	\$0	\$0	\$0	0.20	\$0	\$0	\$0	\$0	\$0	
1.6.4.1	\$0	\$0	\$0	\$0	0.14	\$0	\$0	\$0	\$0	\$14,790	
1.6.4.2	\$109,159	\$685	\$2,108	\$2,601	0.18	\$19,649	\$138	\$399	\$495	\$14,767	
1.6.4.3	\$30,105	\$0	\$0	\$0	0.14	\$4,215	\$0	\$0	\$0	\$4,215	
TOTALS	\$5,995,923	\$3,552,978	\$3,100,753	\$2,963,307		\$223,884	\$474,132	\$284,535	\$342,438	\$1,363,636	