

HCC AIR OP1 ANALYSIS (CAPACITY REPLACEMENT CONSTRUCTION COST = \$73.70/kW/yr)

	Proposed Ops	OP-1 Scenario 1a	OP-1 Scenario 1b	OP-1 Scenario 1c	OP-1 Scenario 1d	OP-1 Scenario 1e	OP-1 Scenario 1f	OP-1 Scenario 2	OP-1 Scenario 3	OP-1 Scenario 4	OP-1 Scenario 5	OP-1 Scenario 6
Energy												
Total Average Energy (MWh)	6,562,244	6,569,922	6,560,591	6,554,664	6,576,748	6,574,733	6,558,640	6,536,980	6,562,126	6,559,243	5,507,772	6,244,862
Total Average Energy Difference (MWh)		7,678	(1,653)	(7,581)	14,504	12,489	(3,604)	(25,264)	(118)	(3,001)	(1,054,472)	(317,382)
Value												
Total Value (\$1,000)	\$ 351,547	\$ 348,420	\$ 348,437	\$ 349,109	\$ 351,259	\$ 351,334	\$ 348,974	\$ 345,238	\$ 351,236	\$ 348,896	\$ 254,974	\$ 323,829
Total Value Difference (\$1,000)		\$ (1,496)	\$ (1,734)	\$ (1,548)	\$ 273	\$ 253	\$ (1,505)	\$ (3,482)	\$ (180)	\$ (1,534)	\$ (74,860)	\$ (19,269)
Transmission Cost (\$1,000)		\$ (1,630)	\$ (1,375)	\$ (890)	\$ (560)	\$ (465)	\$ (1,067)	\$ (2,827)	\$ (131)	\$ (1,117)	\$ (21,713)	\$ (8,448)
Total Value (\$1,000)		\$ (3,126)	\$ (3,109)	\$ (2,438)	\$ (287)	\$ (212)	\$ (2,572)	\$ (6,309)	\$ (311)	\$ (2,651)	\$ (96,573)	\$ (27,718)
Capacity												
Brownlee project (MW)	728	728	728	728	728	728	728	657	728	728	220	629
Oxbow project (MW)	220	220	220	220	220	220	220	220	220	220	69	220
Hells Canyon project (MW)	330	144	179	236	279	279	210	339	229	210	139	339
Scenario Impact												
Total Capacity Construction (MW)		(186)	(151)	(94)	(51)	(51)	(120)	(62)	(100)	(120)	(850)	(90)
Annualized Capacity Capital (\$1,000)		\$ (13,704)	\$ (11,144)	\$ (6,904)	\$ (3,740)	\$ (3,740)	\$ (8,835)	\$ (4,603)	\$ (7,394)	\$ (8,835)	\$ (62,628)	\$ (6,618)
Total Capacity (\$1,000)		\$ (13,704)	\$ (11,144)	\$ (6,904)	\$ (3,740)	\$ (3,740)	\$ (8,835)	\$ (4,603)	\$ (7,394)	\$ (8,835)	\$ (62,628)	\$ (6,618)
Ancillary Services												
Total Reserves Construction (MW)		(13)	(11)	(7)	(4)	(4)	(8)	(4)	(7)	(8)	(59)	(6)
Annualized Reserves Capital (\$1,000)		\$ (959)	\$ (780)	\$ (483)	\$ (262)	\$ (262)	\$ (618)	\$ (322)	\$ (518)	\$ (618)	\$ (4,384)	\$ (463)
Annual Reserves (\$1,000)		\$ (1,469)	\$ (1,469)	\$ (735)	\$ (441)	\$ (220)	\$ (955)	\$ (441)		\$ (955)	\$ (1,469)	\$ (1,469)
Total Reserves (\$1,000)		\$ (2,429)	\$ (2,249)	\$ (1,218)	\$ (703)	\$ (482)	\$ (1,573)	\$ (763)	\$ (518)	\$ (1,573)	\$ (5,853)	\$ (1,933)
Physical Project Modifications												
Total Construction (\$1,000)		\$ (298)	\$ (298)	\$ (298)	\$ (298)	\$ (298)	\$ (298)	\$ (298)		\$ (298)	\$ (298)	
Annual O & M (\$1,000)		\$ (89)	\$ (89)	\$ (89)	\$ (89)	\$ (89)	\$ (89)	\$ (89)		\$ (89)	\$ (89)	
Total Capital Construction Cost (\$1,000)		\$ (387)	\$ (387)	\$ (387)	\$ (387)	\$ (387)	\$ (387)	\$ (387)		\$ (387)	\$ (387)	
Lost Flexibility												
								\$ (2,200)		\$ (2,200)	\$ (2,200)	\$ (2,200)
Total Value of Lost Flexibility (\$1,000)												
TOTAL SCENARIO ANNUALIZED IMPACT (\$1,000):		\$ (19,646)	\$ (16,889)	\$ (10,947)	\$ (5,117)	\$ (4,822)	\$ (13,368)	\$ (12,062)	\$ (8,223)	\$ (13,446)	\$ (165,441)	\$ (36,268)

1. Average annual energy for 5 water year types
 2. Reserves assumed to be 7% of capacity built