

**APPENDIX D**  
**VALUES OF ECONOMIC ANALYSES**

**Table D.1.** Base values of input variables used in sensitivity analyses.

Input variable	PBU			PTU		LNG project	GTL plant
	w/ no MGS	w/ LNG	w/ GTL	w/ LNG	w/ GTL		
prod net back %	—	28.07	15.05	28.07	15.05	28.07	15.05
royalty rate %	12.5	12.5	12.5	14.25	14.25	—	—
state and fed tax rate	0.34	0.34	0.34	0.34	0.34	0.34	0.34
	0.03	0.03	0.03	0.03	0.03	0.03	0.03
liquids premium \$/BBL	—	—	5.00	—	5.00	—	5.00
field pipeline tariffs	—	—	—	0.16	0.16	—	—
	—	—	—	2.64	2.35	—	—
plant efficiency %	—	—	—	—	—	—	60.0
investments \$, millions	1,786	1,786	1,786	911	911	16,026	11,952
op cost factor	—	—	—	—	—	5.0	—
	—	—	—	—	—	—	6.00
shrinkage %	—	—	—	—	—	8.78	—
gas BTU content	—	1,150	1,150	1,150	1,150	1,150	1,150
LNG bonus fraction	—	1.1	—	1.1	—	1.1	—

**Table D.2. Variable sensitivity values for LNG scenario for AEO95 reference price.**

Variable	% change	Net present value (10% discount rate) (\$, millions)		
		PBU	PTU	Gas pipeline/LNG project
Base (no change)	0	11,051	354	0
Producer net back	-30	10,161	202	1,360
	+30	11,940	506	(1,378) <sup>a</sup>
Royalty rate	-30	11,799	393	—
	+30	10,302	315	—
State and Federal tax rates	-30	14,153	471	849
	+30	8,422	249	(809)
Field pipeline tariffs	-30	—	388	—
	+30	—	320	—
Project investment	-30	11,404	449	2,182
	+30	10,697	258	(2,214)
Operating cost factor	-30	—	—	874
	+30	—	—	(886)
Shrinkage	-30	—	—	339
	+30	—	—	(184)
Gas BTU content	-10	10,754	303	(1,031)
	+10	11,347	405	1,020
LNG bonus	-20	10,458	253	(2,078)
	+20	11,644	455	2,038

a. Values in parentheses are negative.

**Table D.3.** Variable sensitivity values for GTL scenario for AEO95 reference price.

Variable	% change	Net present value (10% discount rate) (\$, millions)		
		PBU	PTU	GTL plant
Base (no change)	0	10,397	332	0
Producer net back	-30	9,816	234	931
	+30	10,977	429	(955) <sup>a</sup>
Royalty rate	-30	11,117	370	—
	+30	9,676	294	—
State and Federal tax rates	-30	13,353	445	613
	+30	7,902	231	(566)
Liquids premium	-30	10,311	317	(422)
	+30	10,482	347	417
Field pipeline tariffs	-30	—	349	—
	+30	—	315	—
Plant efficiency	-30	—	—	(2,831)
	+30	—	—	2,649
Investments	-30	10,750	427	1,548
	+30	10,043	236	(1,618)
Operating cost factor	-30	—	—	666
	+30	—	—	(677)
Gas BTU content	-10	10,185	296	(597)
	+10	10,607	367	592

a. Values in parentheses are negative.