RECORD OF COMMUNICATION	[X] PHONE CALL [ ] DISCUSSION [ ] FIELD TRIP [ ] CONFERENCE [ ] OTHER (SPECIFY) FOI EXEMPT (Record of item checked above)	
TO: Bill Constantelos	FROM: Bob Greene 755-2677	DATE August 16, 1977 TIME PM

SUBJECT

Penalty Calculations - USSC, Gary

SUMMARY OF COMMUNICATION

Bob said penalties were computated for the following four separate cases:

- Case I

Initial investment	$67 million
Initial annual O&M	$2.25 million
Investment tax credit rate	.05
Income tax rate	.51 33% +6%
Inflation rate	.1 6%
Return on equity	.111 11.5% (75)
Interest rate	.111 5 3/4%
Equity share of investment	0 .494 .77
Depreciation method	Sum of year's digits
Depreciatable life	5 years
Useful life	15 years
Base annual assessment (Multiply by years out of compliance.)	$3,228,710/year

(Bob also sent up a monthly and yearly payment schedule.)

- Case II

Useful life to 20 years - $2,736,140

- Case III

Equity share of investment 70% - $3,593,030 (30% debt interest)

- Case IV

Equity share 70% and useful life 20 years - $3,016,060

CONCLUSIONS, ACTION TAKEN OR REQUIRED

INFORMATION COPIES

TO: McDonald Bryson Ginsberg Constantelos Ullrich

11380

EPA Form 1300-6 (7-72) REPLACES EPA HQ FORM 6300-9 WHICH MAY BE USED UNTIL SUPPLY IS EXHAUSTED.

A
McDermott
w/ tel. memo.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

August 16, 1977

Mr. James O. McDonald
Director, Enforcement Division
Environmental Protection Agency
Region V
230 South Dearborn Street
Chicago, Illinois 60604

Dear Jim:

Attached are the assumptions and the noncompliance penalty calculations requested by Alex Palikoff. The numbers to work from are the non-tax deductible penalty numbers in the right-hand columns. The base annual assessment is the number to use when requesting an up-front settlement. For example in Case I, if the company was or will be out of compliance for 2 years and 9 months, the settlement would be $8,878,953 ($3,228,710 x 2.75 years).

The payment schedule is to be used if the firm opts to make periodic payments. Again, using Case I, assume the firm will be out of compliance for 2 years and 9 months. If the firm wants to make periodic payments, it would pay: $3,551,580 at the end of the first year or $281,896 per month the first year; $3,906,738 at the end of of the second year or $341,094 per month the second year; and $3,223,058 at the end of the ninth month of the third year or $341,094 per month for 9 months of the third year.

If you have any questions do not hesitate to contact me (FTS: 755-2677). We are willing to assist you in any way we can.

Sincerely yours,

Bob

Robert L. Greene
Economic Analysis Division (PM-220)

Attachment

8/22/77 cc: Bryson
Ullrich
~~[illegible]~~
Ginsberg

11381

U.S. STEEL - GARY

CASE I

Assumptions

Capital Investment = $67,000,000
Initial Operating and Maintenance Expense = $2,250,000
Investment tax credit = .05
Income tax rate = .51
Inflation rate = .10
Return on equity = .111
Interest rate = .111
Equity share of investment = 0
Depreciation method = Sum-of-year digits
Depreciable life = 5 years
Useful life = 15 years

CASE II

Assumptions: Same as Case I except useful life increase to 20 years.

CASE III

Assumptions: Same as Case I except equity share of investment increased to 70 percent.

CASE IV

Assumptions: Same as Case I except equity share increase to 70 percent and useful life increased to 20 years.

11382

CASE I

INITIAL INVESTMENT ?67000000
INITIAL ANNUAL O&M EXPENSE ?2250000
INVESTMENT TAX RATE ?.05
INCOME TAX RATE ?.51
INFLATION RATE ?.1
DISCOUNT RATE ?.111 ← = Return on stockholders' equity
INTEREST RATE ?.111
EQUITY SHARE OF INVESTMENT ?0
DEPRECIATION METHOD - SL=1, SYD=2, AND DDB=3 ?2
DEPRECIATION LIFE IN YEARS ?5
USEFUL LIFE IN YEARS ?15

ASSESSMENT FOR NONCOMPLIANCE

	TAX-DEDUCTIBLE FEE	NON TAX-DEDUCTIBLE PENALTY
CAPITAL RECOVERY FACTOR	0.0648	0.0317
BASE ANNUAL ASSESSMENT	6.58930E+6	3.22871E+6

SCHEDULE

YEAR	TAX-DEDUCTIBLE ANNUAL	TAX-DEDUCTIBLE MONTHLY	NON TAX-DEDUCTIBLE ANNUAL	NON TAX-DEDUCTIBLE MONTHLY
1	7.24812E+6	575298.	3.55159E+6	281896.
2	7.97293E+6	632928.	3906738	310085.
3	8770228	696110.	4.29741E+6	341094.
4	9.64725E+6	765721.	4.72715E+6	375203.
5	1.06130E+7	842293.	5.19987E+6	412724.
6	1.16733E+7	926523.	5.71985E+6	453996.
7	1.28405E+7	1019175	6.29184E+6	499396.
8	1.41245E+7	1.12109E+6	6.92102E+6	549335.
9	1.55370E+7	1.23320E+6	7.61313E+6	604269.
10	17090692	1.35652E+6	8.37445E+6	664696.
11	18799761	1.49217E+6	9.21188E+6	731165.
12	2.06797E+7	1.64139E+6	10133031	804282.
13	2.27477E+7	1.80553E+6	1.11445E+7	884710.
14	2.50225E+7	1.98608E+6	1.22610E+7	973131.
15	2.75247E+7	2.13469E+6	1.34871E+7	1.07050E+6

11383

CASE II

INITIAL INVESTMENT ?67000000
INITIAL ANNUAL O&M EXPENSE ?2250000
INVESTMENT TAX RATE ?.05
INCOME TAX RATE ?.51
INFLATION RATE ?.1
DISCOUNT RATE ?.111
INTEREST RATE ?.111
EQUITY SHARE OF INVESTMENT ?0
DEPRECIATION METHOD - SL=1, SYD=2, AND DDB=3 ?2
DEPRECIATION LIFE IN YEARS ?5
USEFUL LIFE IN YEARS ?20

ASSESSMENT FOR NONCOMPLIANCE

	TAX-DEDUCTIBLE FEE	NON-TAX-DEDUCTIBLE PENALTY
CAPITAL RECOVERY FACTOR	0.0498	0.0244
BASE ANNUAL ASSESSMENT	5.58397E+6	2.73614E+6

SCHEDULE

YEAR	TAX-DEDUCTIBLE ANNUAL	TAX-DEDUCTIBLE MONTHLY	NON TAX-DEDUCTIBLE ANNUAL	NON TAX-DEDUCTIBLE MONTHLY
1	6.14236E+6	487531.	3.00976E+6	238890.
2	6.75660E+6	536285.	3.31073E+6	262779.
3	7.43226E+6	589913.	3.64181E+6	289057.
4	8.17549E+6	648904.	4.00599E+6	317963.
5	8.99303E+6	713795.	4.40659E+6	349759.
6	9.89234E+6	785174.	4.847245	384735.
7	1.08816E+7	863692.	5.33137E+6	423209.
8	1.19697E+7	950061.	5.86517E+6	465532.
9	1.31667E+7	1.04507E+6	6.45168E+6	512083.
10	1.44834E+7	1.14957E+6	7.09685E+6	563291.
11	1.59317E+7	1.26453E+6	7.80654E+6	619620.
12	1.75249E+7	1.39098E+6	8.58719E+6	681582.
13	1.92774E+7	1.53008E+6	9.44591E+6	749740.
14	2.12051E+7	1.68309E+6	1.03995E+7	824714.
15	2.33256E+7	1.85140E+6	1.14395E+7	907186.
16	25658171	2.03654E+6	1.25725E+7	997904.
17	2.82240E+7	2.24019E+6	1.38299E+7	1.09769E+6
18	3.10464E+7	2.46421E+6	1.52127E+7	1.20746E+6
19	3.41510E+7	2.71063E+6	1.67340E+7	1.32821E+6
20	3.75661E+7	2.98170E+6	18407402	1.46103E+6

11384

CASE III

INITIAL INVESTMENT ?67000000
INITIAL ANNUAL O&M EXPENSE ?2250000
INVESTMENT TAX RATE ?.05
INCOME TAX RATE ?.51
INFLATION RATE ?.1
DISCOUNT RATE ?.111
INTEREST RATE ?.111
EQUITY SHARE OF INVESTMENT ?.7
DEPRECIATION METHOD - SL=1, SYD=2, AND DDB=3 ?2
DEPRECIATION LIFE IN YEARS ?5
USEFUL LIFE IN YEARS ?15

ASSESSMENT FOR NONCOMPLIANCE

	TAX-DEDUCTIBLE FEE	NON TAX-DEDUCTIBLE PENALTY
CAPITAL RECOVERY FACTOR	0.0759	0.0372
BASE ANNUAL ASSESSMENT	7.33271E+6	3.59303E+6

SCHEDULE

YEAR	TAX-DEDUCTIBLE ANNUAL	TAX-DEDUCTIBLE MONTHLY	NON TAX-DEDUCTIBLE ANNUAL	NON TAX-DEDUCTIBLE MONTHLY
1	8.06598E+6	640212.	3.95233E+6	313704.
2	8872574	704234.	4.34756E+6	345075.
3	9.75933E+6	774657.	4.78232E+6	379582.
4	1.07398E+7	852123.	5260549	417540.
5	1.18094E+7	937335.	5.78660E+6	459294.
6	12990335	1.03107E+6	6.36526E+6	505224.
7	1.42894E+7	1.13419E+6	7.00179E+6	555746.
8	15718305	1.24759E+6	7.70197E+6	611320.
9	1.72901E+7	1.37235E+6	8.47217E+6	672453.
10	1.90191E+7	1.50959E+6	9.31938E+6	739698.
11	20921063	1.66055E+6	1.09513E+7	813668.
12	2.30132E+7	1.82660E+6	11376453	895034.
13	25314496	2.00926E+6	1.24041E+7	984538.
14	2.78459E+7	2.21019E+6	1.36445E+7	1.08299E+6
15	30630527	2.43121E+6	1.50090E+7	1.19129E+6

11385

CASE IV

INITIAL INVESTMENT ?67000000
INITIAL ANNUAL O&M EXPENSE ?2250000
INVESTMENT TAX RATE ?.05
INCOME TAX RATE ?.51
INFLATION RATE ?.1
DISCOUNT RATE ?.111
INTEREST RATE ?.111
EQUITY SHARE OF INVESTMENT ?.7
DEPRECIATION METHOD - SL=1, SYD=2, AND DDB=3 ?2
DEPRECIATION LIFE IN YEARS ?5
USEFUL LIFE IN YEARS ?20

ASSESSMENT FOR NONCOMPLIANCE

	TAX-DEDUCTIBLE FEE	NON TAX-DEDUCTIBLE PENALTY
CAPITAL RECOVERY FACTOR	0.0583	0.0286
BASE ANNUAL ASSESSMENT	6.15523E+6	3.01606E+6

SCHEDULE

YEAR	TAX-DEDUCTIBLE ANNUAL	TAX-DEDUCTIBLE MONTHLY	NON TAX-DEDUCTIBLE ANNUAL	NON TAX-DEDUCTIBLE MONTHLY
1	6770750	537408.	3.31767E+6	263330.
2	7.44782E+6	591149.	3.64943E+6	289663.
3	8.19261E+6	650263.	4.01438E+6	318629.
4	9011868	715290.	4.41582E+6	350492.
5	9.91305E+6	786819.	4.85740E+6	385541.
6	10904360	865501.	5.34314E+6	424095.
7	1.19949E+7	952051.	5877450	466505.
8	1.31943E+7	1.04726E+6	6.46519E+6	513155.
9	1.45137E+7	1.15198E+6	7.11171E+6	564471.
10	1.59651E+7	1.26718E+6	7.82289E+6	620918.
11	1.75616E+7	1.39390E+6	8.60517E+6	683010.
12	1.93177E+7	1.53329E+6	9.46569E+6	751311.
13	2.12495E+7	1.68662E+6	1.04123E+7	826442.
14	23374462	1.85528E+6	1.14535E+7	909086.
15	2.57119E+7	2.04080E+6	1.25988E+7	999994.
16	2.82831E+7	2.24489E+6	1.38587E+7	1.09999E+6
17	3.11114E+7	2.46937E+6	1.52446E+7	1.20999E+6
18	34222549	2716311	1.67690E+7	1.33099E+6
19	3.76448E+7	2.98794E+6	1.84460E+7	1.46409E+6
20	4.14093E+7	3.28674E+6	2.02905E+7	1.61050E+6

11386