error is discovered.

CHOOSE OUTPUT OPTION 1, 2, 3, OR 4.

1

POSITION PAPER ON BOTTOM LINE OF THIS PAGE,
THEN PRESS CARRIAGE RETURN

USX Clairton and Edgar Thomson Plants BEN VERSION 4.0 August 16, 1994

THE ECONOMIC BENEFIT OF A 19 MONTH DELAY
DATE, 13 MONTHS AFTER NONCOMPLIANCE $ 107

(DOLLARS IN THOUSANDS)

PLEASE PRESS CARRIAGE RETURN FOR MORE OUTPUT

THE ECONOMIC BENEFIT OF A 19 MONTH DELAY
DATE, 13 MONTHS AFTER NONCOMPLIANCE $ 107

(DOLLARS IN THOUSANDS)

PLEASE PRESS CARRIAGE RETURN FOR MORE OUTPUT

->->->->->-> THE ECONOMIC BENEFIT CALCULATION ABOVE <-<-<-<-<-<-
USED THE FOLLOWING VARIABLES:

USER SPECIFIED VALUES

1A. CASE NAME = USX Clairton and Edgar Thomson Plants			
1B. PROFIT STATUS =		FOR-PROFIT	
1C. FILING STATUS =		C-CORPORATION	
2. INITIAL CAPITAL INVESTMENT (RECURRING)=	$	520000	1994 DOLLARS
3. ONE-TIME NONDEPRECIABLE EXPENDITURE =	$	0	
4. ANNUAL EXPENSE =	$	32000	1994 DOLLARS
5. FIRST MONTH OF NONCOMPLIANCE =		11, 1993	
6. COMPLIANCE DATE =		6, 1995	
7. PENALTY PAYMENT DATE =		12, 1994	

PLEASE PRESS CARRIAGE RETURN FOR MORE OUTPUT

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PLEASE PRESS CARRIAGE RETURN FOR MORE OUTPUT

    STANDARD VALUES
    ---------------
 8. USEFUL LIFE OF POLLUTION CONTROL EQUIPMENT =            15 YEARS
 9. MARGINAL INCOME TAX RATE FOR 1986 AND BEFORE =           49.6 %
10. MARGINAL INCOME TAX RATE FOR 1987 TO 1992 =              38.6 %
11. MARGINAL INCOME TAX RATE FOR 1993 AND BEYOND =           39.4 %
12. ANNUAL INFLATION RATE =                                   1.3 %
13. DISCOUNT RATE: WEIGHTED-AVERAGE COST OF CAPITAL          11.3 %

DO YOU WISH TO DO ANOTHER ECONOMIC SAVINGS CALCULATION?
(0=NO; 1=YES, USING STANDARD VALUES; 2=YES, USING OWN INPUTS)
```

RECORD OF COMMUNICATION

☒ PHONE CALL ☐ DISCUSSION ☐ FIELD TRIP ☐ CONFERENCE
☐ OTHER (SPECIFY)

(Record of item checked above)

TO: LAND COMBUSTION
(215) 781-0810

FROM: J. HAGEDORN

DATE: ~2:00PM
TIME: 8-10-94

SUBJECT: COST OF NOX CEMS

SUMMARY OF COMMUNICATION

THE LAND REPRESENTATIVE TOLD ME THAT THEY SELL BOTH IN SITU AND EXTRACTIVE MODELS. THEIR IN SITU MODEL THAT MONITORS NOX CO O2 COSTS $26,000 AND THEIR EXTRACTIVE MODEL FOR THE SAME POLLUTANTS IS $30,000. HE SAID THE DATA ACQUISITION SYSTEM COULD COST BETWEEN $10,000 and $30,000 AND SAID THE INSTALLATION COST WOULD BE LOW IF COMPANY ALREADY HAS A PLATFORM AND READY ACCESS TO THE EMISSION POINT. HE SAID I SHOULD CALL PHILA. ELECTRIC AT THEIR EDDYSTONE PLANT - THEY HAVE A LOT OF EXPERIENCE WITH MONITORING COSTS.
215-841-4000 - I GOT FROM DIRECTORY ASSISTANCE

CONCLUSIONS, ACTION TAKEN OR REQUIRED

RECORD OF COMMUNICATION

☑ PHONE CALL ☐ DISCUSSION ☐ FIELD TRIP ☐ CONFERENCE
☐ OTHER (SPECIFY)

(Record of item checked above)

TO: J. HAGEDORN

FROM: JIM BARTON (COLUMBIA SCIENTIFIC)

DATE 8-15-94

TIME 4:05

SUBJECT
NOx CEM COSTS

SUMMARY OF COMMUNICATION

NOx CEM = $80000 for everything - NOx, O2, diluent, probe
$ data acquisition system
$25,000 for data acquisition system (extractive system with multiple source capability)
2-3 man hours/month for OTM per unit (CEM system)
$4000 for relative accuracy test - extra

Dilution extractive - $95000 capital cost
1 hour/quarter OTM

Normal delivery = 12-16 weeks
Quicker delivery = $15-20000 more (8-10 weeks delivery)
$100000 (5 weeks delivery)

CONCLUSIONS, ACTION TAKEN OR REQUIRED

RECORD OF COMMUNICATION

☒ PHONE CALL ☐ DISCUSSION ☐ FIELD TRIP ☐ CONFERENCE
☐ OTHER (SPECIFY)

(Record of item checked above)

TO: RICK O'DITN. (PECO ENERGY)

FROM: JIM HAGEDORN

DATE 8-16-94

TIME 11:45AM

SUBJECT NOX CEM COST DATA

SUMMARY OF COMMUNICATION

RICK HAD RETURNED MY CALL AND I CALLED HIM BACK.
THE COST INFO IS AS FOLLOWS:

$600 000 / system
Platform = 300000
600000 - 300000 = 300000
which includes
Analyzer = 10-20 000
Calgas = 2000
Dilution probe = 17000
Sample system = 120000
Sample line = $32 / foot
Shelter = 25 000
Engineering = 20% of capital
Data acquisition = 60 000
PLC = 12000
Software = 21000
Integration = 8000
O+M = 5% = $5000 / yr / system

He said all told, it all you're going to monitor is NOx,
$130,000 per system

CONCLUSIONS, ACTION TAKEN OR REQUIRED