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FINAL REPORT

Alaskan Electric Power

An Analysis of Future Requirements and Supply Alternatives for the Railbelt Region

March 1978

For
Alaska Division of Energy and Power Development,
Department of Commerce and Economic
Development; and the Alaska Power Authority

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FINAL REPORT

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An Analysis of Future Requirements and Supply Alternatives for the Railbelt Region

**For
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Development; and the Alaska Power Authority**

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March 1978

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A

APPENDIX A

SUPPORTING DETAIL, POWER REQUIREMENTS FORECASTS

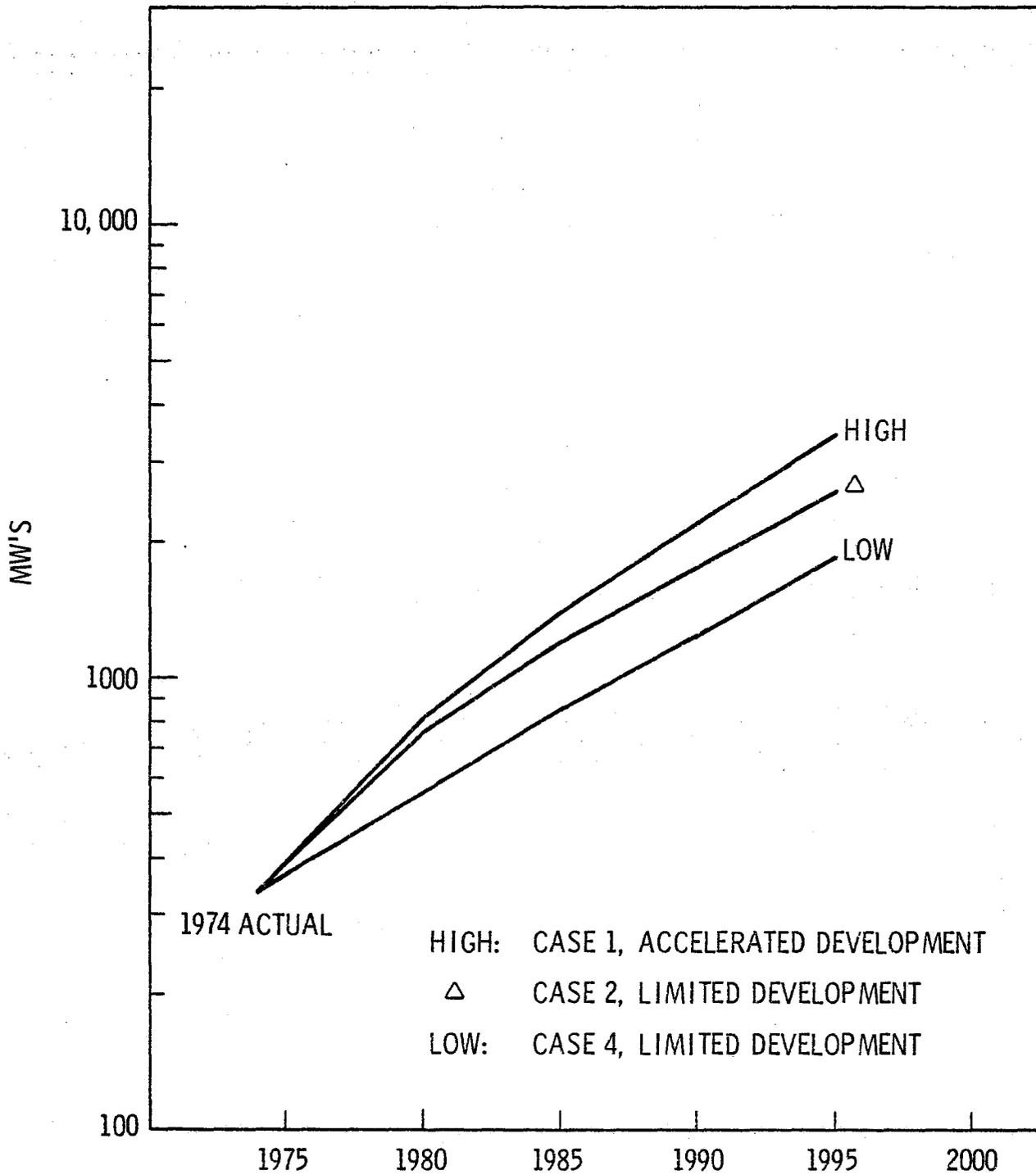


FIGURE A.1. ISER Study Utility Peak Load; Anchorage, South Central, Fairbanks Regions
 SOURCE: Table 4.4., p. 4.10.

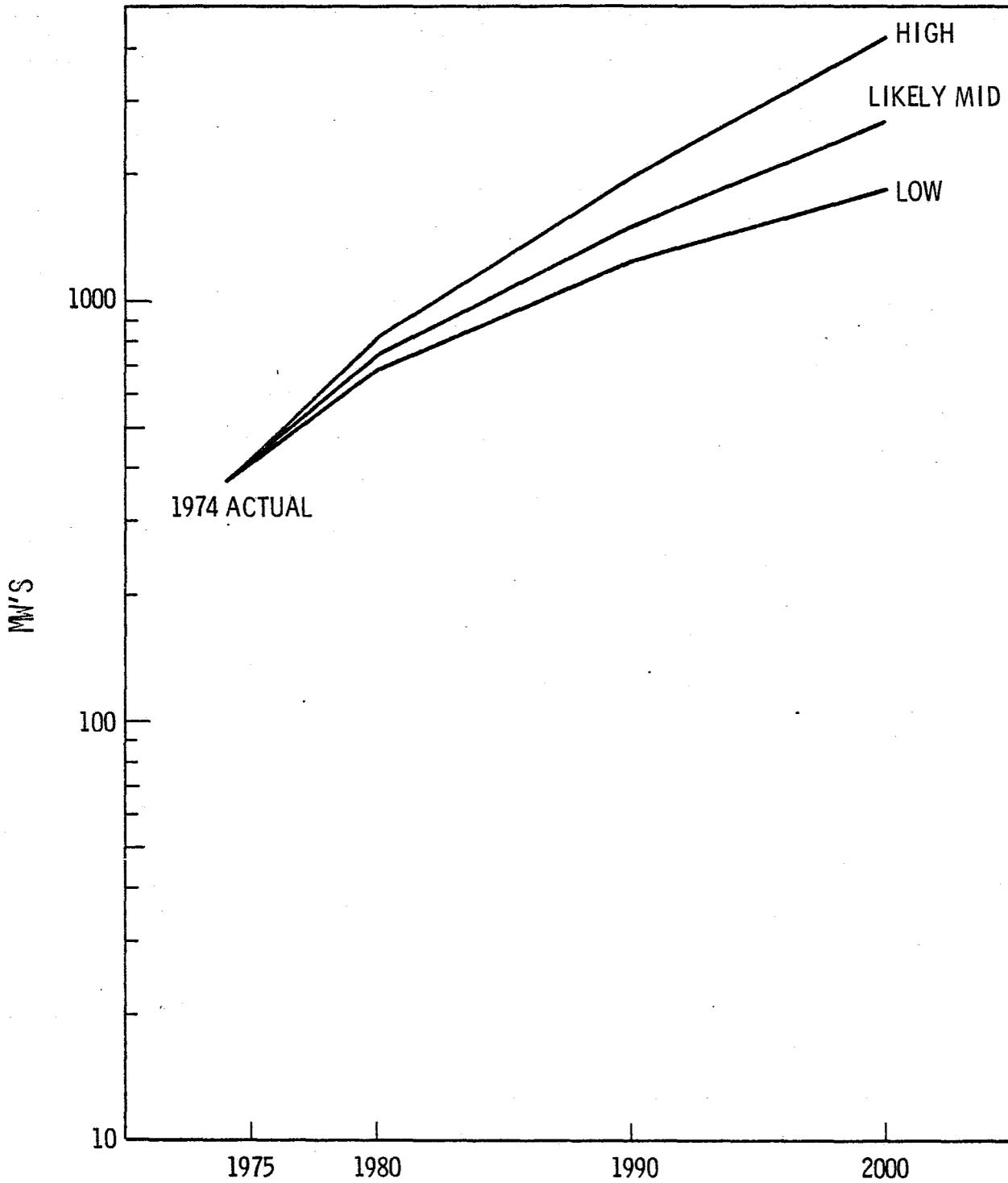


FIGURE A.2. Utility Peak Load; Railbelt Intertied Area

SOURCE: Table 4.9, p. 4.19

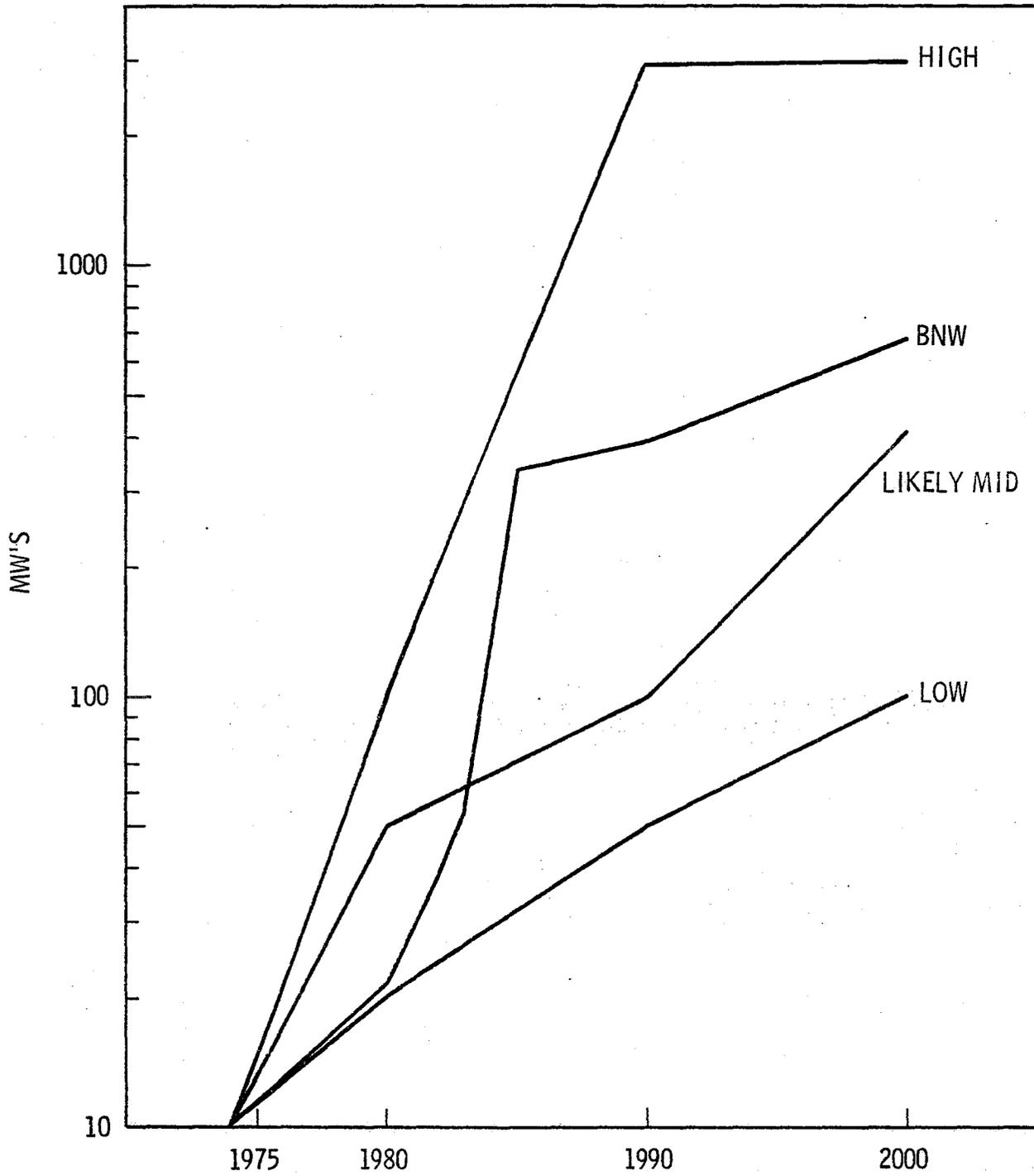


FIGURE A.3. Industrial Peak Load; Anchorage Area
 SOURCE: Tables 4.11 and 4.12, pp. 4.23 and 4.24

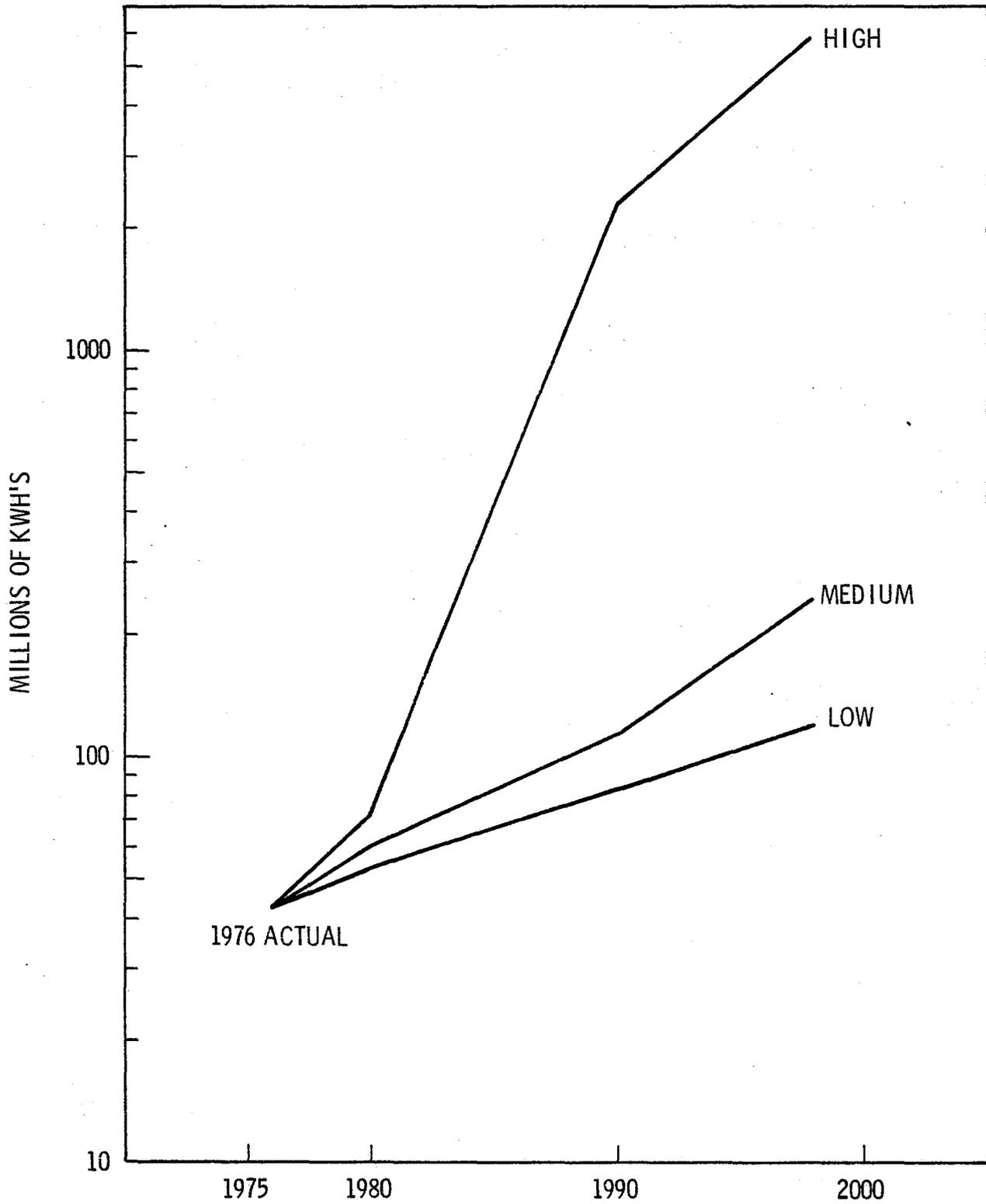


FIGURE A.4. Utility Annual Load; GVEA and FMUS Areas (Fairbanks)
(IAEAT Study)

SOURCE: Table 4.13, p. 4.25

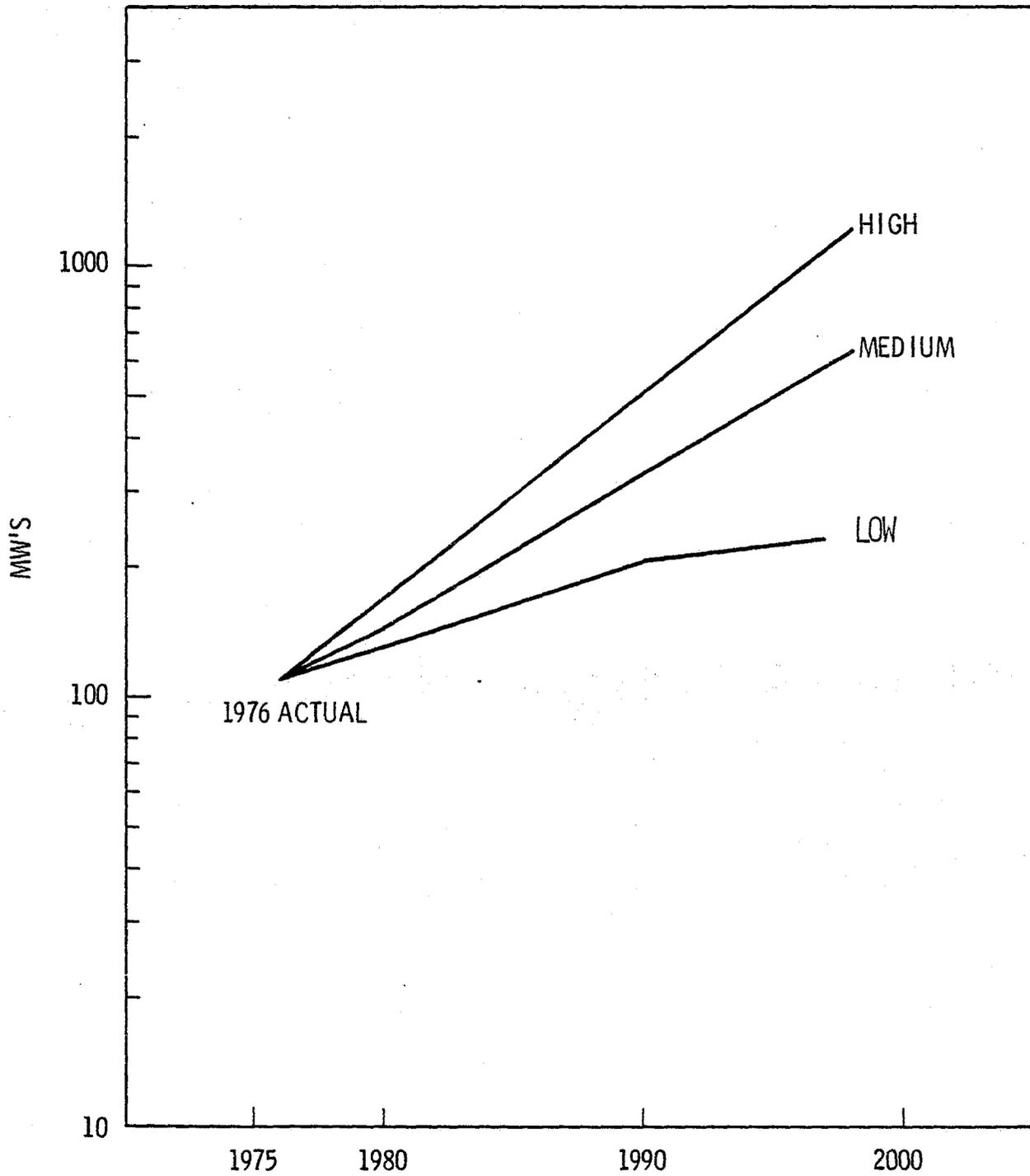


FIGURE A.5. Utility Peak Loads; GVEA and FMUS Areas (Fairbanks) (IAEAT Study)

SOURCE: Table 4.13, p. 4.25
A.5

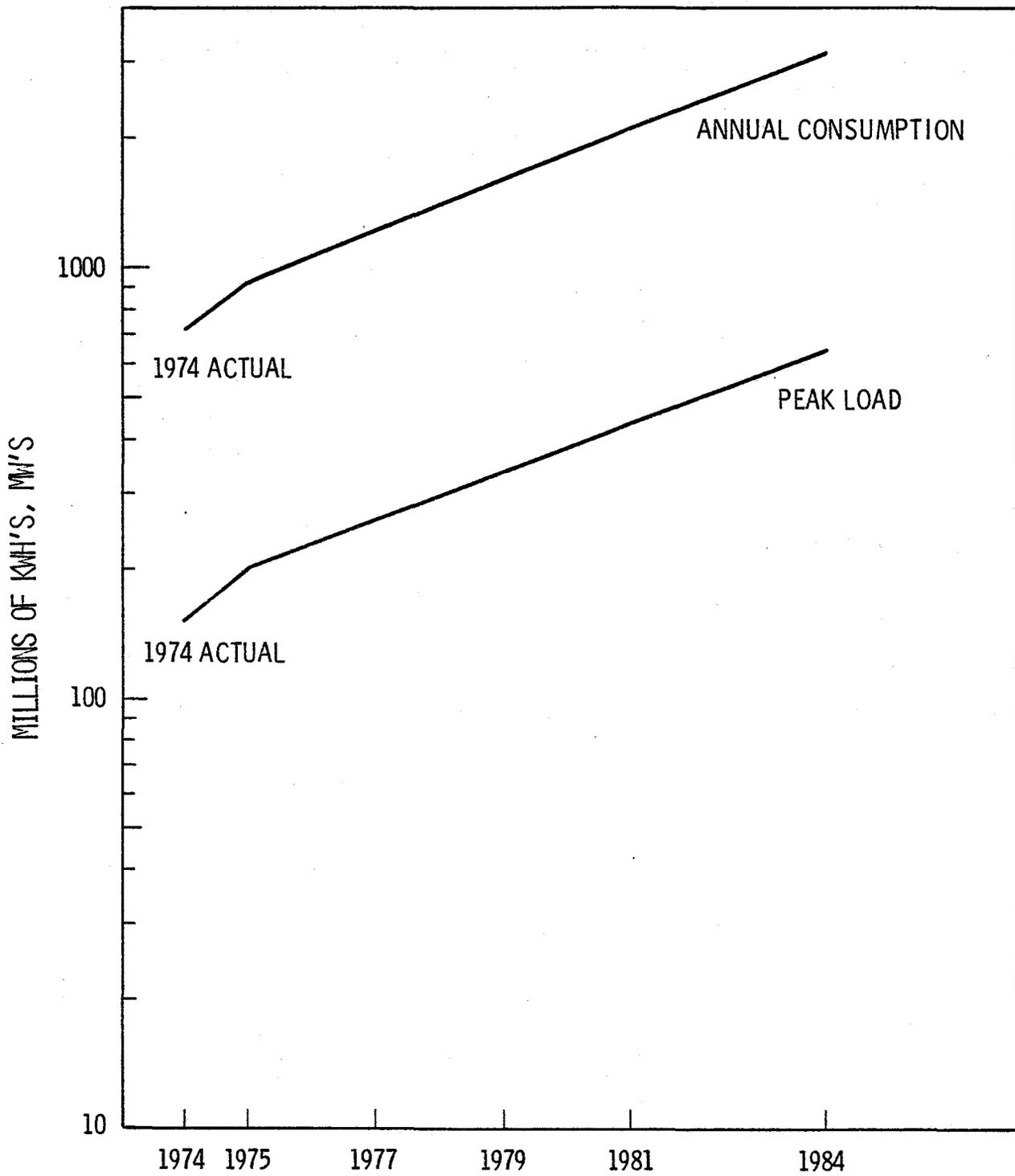


FIGURE A.6. Utility Loads; CEA Area (Anchorage)
 (CEA Service Area Study)
 SOURCE: Table 4.14, p. 4.26
 A.6

B

APPENDIX B

HYDROELECTRIC PROJECTS

HYDROELECTRIC PROJECTS

INTRODUCTION

1. The State of Alaska is blessed with large quantities of falling water at numerous locations suitable for development in the interest of hydroelectric power generation. The Susitna River basin contains many of these possibilities as does the Yukon River, Copper River and numerous other streams which flow through relatively undeveloped stream courses suitable for the construction of dams and reservoirs. Hydroelectric power involves the beneficial use of renewable natural resource with negligible adverse impact on man's environment. Adverse impacts on fish and wildlife by dams and their impoundments are the most serious of environmental concerns but they are frequently only local in nature and small in the long term due to mitigation measures and natural adjustments which occur over time. The changed scenic and use values involve positive as well as negative aspects and frequently balance each other in an overall evaluation if approached without a single interest bias. No study of a solution to the power needs of the Railbelt area of Alaska can be made without full consideration being given to the hydropower potential which exists within and adjacent to the region.

2. The purpose of this Appendix is to review what is known about this potential and to weigh the various alternatives toward selection of the most viable for more detailed consideration and for comparison with the various thermal and other potential electric power sources. Final analysis of the various dam and reservoir sites will not be possible with the limited reconnaissance type information currently available. For example, site geology and foundation information is generally limited to surface reconnaissance and interpretation. In an area subject to violent earthquake activity full knowledge and a complete understanding of the geology of both the dam and reservoir site are essential for complete project evaluation. In addition to the problem of physical safety, a full understanding of potential environmental impacts is also necessary for complete project evaluation. Many otherwise sound and desirable projects have been found totally unacceptable because of concerns for their effects on fish and wildlife. These and other factors will be considered in the following discussions to the extent that present knowledge permits.

UPPER SUSITNA ALTERNATIVES

3. The hydropower potential of the Susitna River Basin has been recognized for many years. The difficulty of access to the upper basin area has made even reconnaissance of potential development sites both difficult and expensive. Since the relatively small power loads to date could be adequately served with the abundant supplies of coal, oil and natural gas there were available, there was little incentive to pursue in detail the potentials for large and costly hydropower development. However, several schemes have been suggested over time involving single projects at known sites as well as two, three and four dam systems for larger, more complete development of the resource. Few, if any, of the individual project potentials have been fully proven out and now, with the large power load growth foreseen for the Railbelt area and the critical energy shortage, further attention must be given to selecting those worthy of more detailed study.

4. The various alternative projects and systems are listed on Table B-1 and further discussion is contained in the following.

5. Single dam systems - The three principal projects are Watana, Devil Canyon and Susitna. The Watana and Devil Canyon projects, together with an interconnecting transmission system, are covered by the Corps of Engineers in their Interim Feasibility Report of December 1975, titled "Southcentral Railbelt Area, Alaska - Upper Susitna River Basin." The Susitna I project is presented in a report prepared by the Henry J. Kaiser Company dated September 1974, titled "Reassessment Report on Upper Susitna River Hydroelectric Development for the State of Alaska." All three project sites lie within 45 mi of the Denali Fault, a major tectonic feature, and a lesser Susitna Fault lies only 2.5 mi west of the Watana site. All dam sites are therefore within a zone of major seismic activity. Each of the three potential single dam developments are discussed briefly in the following paragraphs.

6. Watana Dam - The Corps report presents Watana as a rock or earthfill embankment dam with a side channel spillway to an adjacent stream valley. Its recommended height is 810 ft with a full pool elevation of 2200 ft. Some data is also presented for lesser heights (pools at Elev. 2050 ft and 1905 ft).

TABLE B-1. Railbelt Hydropower Alternatives

<u>Concept</u>	<u>River Mile</u>	<u>Type</u>	<u>Structural Height (FT)</u>	<u>Normal Pool Elev. (FT)</u>	<u>Reservoir Area (Acres)</u>	<u>Miles of River Inundated</u>	<u>Installed Capacity (MW)</u>	<u>Annual Energy (KWh-10⁹)</u>	<u>Project Cost (\$-10⁶)</u>	<u>Capital Cost (\$/KW)</u>	<u>Operation, Maintenance & Replacement Costs (\$/KW/YR)</u>
Watana (USCE)	165	Earthfill	810	2200	43,000	54	686	3.5	1,318	1,921	1.63
Watana & Devil Canyon (USCE)	165	Earthfill	810	2200	43,000	54	776	3.5	1,318	--	--
	134	Conc. Thin Arch	635	1450	<u>7,550</u>	<u>28</u>	<u>792</u>	<u>3.4</u>	<u>682</u>	--	--
					51,000	82	1,568	6.9	2,000	1,275	1.79
Bradley Lake (USCE, APA)	-	Concrete Gravity	100	1170	2,000	Existing Lake	70	0.32	160	2,286	9.28
Chakachanna (USBR, 1962)	-	Tunnel	-	1127	15,250	Existing Lake	366	1.6	804	2,196	5.12
Wood Canyon (USBR-Copper R.)	84.7	Concrete Gravity	615	900	NA	48	3,600	NA	3,524	882	NA
Wood Chopper (Yukon River)	1153	Earthfill	380	1030	415,000	NA	2,440	NA	3,200	1,398	NA

The high dam would provide about eight million acre-ft of usable storage and have an installed capacity of slightly over 700 MW. Operating alone or as the first element of a two or more dam system, Watana would provide about 686 MW of dependable capacity and 3.3 billion kWh of average annual energy. The estimated construction cost is approximately \$1.350 billion, including transmission, based on January 1977 price levels. The large embankment section proposed could be designed to withstand potential earthquake forces and unless unexpected weaknesses are later discovered in the foundation or abutments, (i.e., permafrost lenses), the dam could be considered safe in spite of its height. The desirability of providing a record structure in this environment could be questioned, and further study may find a lesser project more desirable. Fish and wildlife conflicts are not yet fully defined but since fish migration is essentially blocked by the fast water at the downstream Devil Canyon section, only resident fish would be concerned. The extent of the resident fishery and wildlife disruption are yet to be determined but the magnitude is believed small with nominal mitigation measures.

7. In view of the large initial construction cost for Watana, consideration has been given to constructing the initial project to a lower elevation with provisions made for raising the project at a later date. Preliminary studies have been made assuming the project would be constructed initially to mid-height (pool elevation 2050 ft) and later raised to full height (pool elevation 2200 ft). Indications are that there would be little or no saving in initial cost and that the ultimate full height project would be substantially greater than if constructed to full height initially. Because of the smaller usable storage capacity of the initial midheight dam (4.5 versus 8 million acre-ft) a larger spillway capacity would probably be required. The side channel spillway proposed with the embankment dam would not be practical. The most feasible solution would be to substitute a more expensive concrete gravity dam with an overflow spillway in the river section. Construction of a gravity dam with an ultimate-height base would cost as much as a full height embankment dam. The later raising and other modifications would cost an additional \$150 to \$200 million.

8. There is some question, however, as to the desirability of a two step construction plan. By the time the first step could be completed in about 1990 the peak demand will be increasing at the rate of over 100 MW per year and the 457 MW of dependable capacity of the medium height dam would be used up within four yr. This would require remobilization for raising Watana within a year of initial completion or acceleration of the next project to fill the void. On the other hand the full height Watana would satisfy the load growth needs for at least the five years required to construct the follow-on Devil Canyon or alternative project.

9. Devil Canyon - The Devil Canyon project was originally recommended by the Bureau of Reclamation and was adopted as the companion project to the larger upstream Watana project by the Corps of Engineers in their December 1975 feasibility report. The Corps did little additional study of the Devil Canyon site but rather adopted the Bureau findings and recommendations as adequate for the feasibility report. The Bureau recommended a 635 ft concrete thin arch dam which would have a usable storage capacity of 790,000 acre-ft and an installed capacity of about 210 MW if constructed as a single project or about 700 MW if constructed after Watana and utilizing the large Watana storage. Devil Canyon is located in the same earthquake area as Watana which would argue strongly against a thin arch dam. A concrete gravity dam would cost about the same or a rock fill embankment could be provided at a slightly lesser cost if materials are close at hand. Either substitute would greatly increase the safety factor.

10. The Devil Canyon site is also located above the area generally used by anadromous fish and the regulated releases can be expected to benefit the downstream fishery. The steep walls of the canyon occupied by the dam and reservoir provide little wildlife habitat. Accordingly, it appears that the Devil Canyon project would have negligible adverse affects on the fish and wildlife resource.

11. Susitna I or High Devil Canyon - In 1974 the Henry J. Kaiser Company contemplated development of the Susitna I project located about 5 miles upstream from the Bureau's Devil Canyon site. This site is covered in the feasibility report as the High Devil Canyon proposal. This site permits construction of a higher dam than at Devil Canyon (800 ft versus 635 ft) with nearly 4 million

acre-ft of usable storage. It would, however, eliminate the Watana site. The Kaiser Company proposed either a sloping core rock fill embankment dam or a concrete-face type rock fill embankment. They favored the latter for several reasons including the apparent scarcity of fine material for the core section. As noted above, the frequency and magnitude of earthquakes expected in the area would suggest that a vertical core embankment be constructed for such a high dam for safety reasons. The fish and wildlife aspects of Susitna I would be similar to Devil Canyon and Watana.

12. Two dam systems - It appears clear from the adopted midrange load growth forecasts that if hydropower is to be relied on a single dam will not be adequate for more than a few years. Load growths exceeding 100 MW per year after 1990 and possibly exceeding 300 MW after the year 2000 suggest the need for planning for more than one dam. Should load growths only materialize in the lower range of forecasts, reducing the above annual increments by about 40%, a second dam or some other substantial source of added power will be required shortly after the year 2000. It appears likely at the present time that the first of the hydroelectric projects could not be on the line much before 1990, allowing for a four year study period, a two year additional design period, followed by five or six years of construction. A decision on the first dam must be made as soon as possible but within five years from now in order to meet the above schedule. An additional five years would be available before the next decision point is reached. By that time the future will be much clearer than it is today. Nuclear plants may well be the best solution by that time. However, selection of the first plant must consider the viability of one or more follow on plants if and when needed. Assuming one of the three above single dam projects (Watana, Devil Canyon or Susitna I) will be the first project, alternative two dam systems are discussed in the following paragraphs.

13. Devil Canyon - Denali - This was the earliest plan for development of the Susitna River as proposed by the Bureau of Reclamation. The Denali Reservoir was included as the second project to add 3.8 million acre-ft of storage to the Devil Canyon project. Because of the low head and the extreme draft necessary at Denali no power plant was proposed. The dependable capacity at Devil

Canyon was increased from about 200 MW to 575 MW with the added storage. The Denali project has several problems, however. First, located near the Denali Fault and with evidence of permafrost lenses in its foundation the physical adequacy of the site is subject to serious question. The Denali Reservoir would add further wildlife problems plus a recreation problem as it would flood the Denali Highway and an already established recreation area.

14. Watana-Devil Canyon - This is the basic project proposed by the Corps of Engineers in their December 1975 feasibility study. Analysis was made to determine which could be built first. Although the results were not entirely conclusive, the Corps selected Watana for the first project because of the superior flow regulation afforded by the larger Watana storage and cost savings would result if regulation at Watana was available during construction of Devil Canyon. Construction of Watana first would provide power to meet the load while Devil Canyon was being built. Construction forces and equipment could be moved from Watana to Devil Canyon for an orderly construction sequence. Construction of Devil Canyon first would require overlapping or simultaneous construction on two projects.

15. Watana (low)-Devil Canyon - This plan presented by the Harza Engineering Company suggests a lower Watana dam, either as a final project or as the first phase of a two step project. There would be considerable merit in a plan that could provide increasing elements of new generation in increments to meet the load growth without excess capital expenditure in advance of need. Two step construction was discussed in paragraphs 7 and 8. The possibility of providing a lower Watana and a third dam at the Vee site will be discussed under the subject of multiple project systems.

16. Susitna I-Olson - This system is derived from the Kaiser Company plan for Susitna I (High Devil Canyon) by adding a small reregulating dam and base load plant downstream from the large Susitna I plant. Olson would be a low head dam of about 145 ft using its 43,000 acre-ft pondage for reregulation of upstream releases. Its 190 MW installation would be dependent upon the upstream storage releases for water to maintain power generation. It would be better suited, powerwise, to be the downstream project in a larger system with Olson, Susitna I,

Vee and Denali which is the Kaiser four dam system. However, its value would be measurable with only Susitna I since downstream fish and wildlife would be otherwise adversely affected by large-flow variations.

17. Multiple dam systems - The multiple dam systems generally involve future additions of such project potentials as Denali, Vee, Olson and Susitna II to the two dam plans already discussed. None of these additional projects have been explored to the extent that they can be considered viable additional projects at this time.

18. Watana-Devil Canyon-Denali - This three dam system is a logical extension of the two dam system, adding storage at the Denali project of 3.8 million acre-ft to the downstream Watana-Devil Canyon system. This system would provide the largest amount of usable storage and, as a result, the largest dependable capacity and firm energy capability. Because of the possible physical limitations in the Denali site, however, as well as the added environmental impacts anticipated it is believed that any decision adopting this project should await further study.

19. Watana (Low)-Devil Canyon-Vee-Denali - This concept has merit for two reasons. First it reduces the large initial expenditure for high Watana plus transmission from in excess of \$1.3 billion to about \$800 million. The other increments, if constructed, would be in the range of \$500 to \$600 million each. Secondly it reduces the extremely high embankment dam at Watana from 810 to 515 ft which would be safer in the earthquake area. However, the system would have less usable storage and dependable capacity, at an increased ultimate cost of \$300 million, than the High Watana-Devil Canyon system. It also includes the questionable Denali site and the unconfirmed Vee site.

20. Susitna I-Olson-Vee-Denali - This system would also provide a large amount of usable storage (8.7 million acre-ft) and about 1350 MW of dependable capacity. It includes the Vee site to be confirmed, however, and the already questionable Denali site.

21. Susitna I-Olson-Susitna II - This system includes a possible site downstream from the Vee site identified by the Kaiser Company. No exploration has been made to determine its feasibility or relative merits as compared to the Vee site just upstream.

OTHER HYDROPOWER POTENTIALS

22. Bradley Lake - This power site is located on the Kenai Peninsula at the head of Kachemak Bay. It was studied extensively by the Corps of Engineers as a source of power for the Homer-Anchorage area. With the availability of then cheap natural gas on the Kenai Peninsula, the project could not be justified, however, although it would be competitive with future coal fired thermal generation. The proposal involves tapping a perched lake and dropping the water to sea level for power generation. Although it would have a negligible impact on the environment, it would provide a dependable capacity of only 70 MW and could best serve local loads as an element of the Kenai Peninsula utility system.

23. Chakachamna - This project was studied by the Bureau of Reclamation and involves tapping the Chakachamna Lake and carrying the water through an 11-mi tunnel to a 320 MW power plant on the headwaters of McArthur River some 65 air miles west of Anchorage across Cook Inlet. It would require 115 mi of transmission to reach Anchorage and vicinity but at a greater cost than the Susitna projects. The environmental impacts due to lake fluctuation and the long transmission corridor would probably be minor due to the isolation and lack of utilization of the area.

24. Wood Canyon - This project was studied briefly by the Corps of Engineers and involves a 615 ft dam in Wood Canyon at mile 85 on the Copper River located about 250 mi east of Anchorage. The project would provide about 9 million acre-ft of usable storage and over 1000 MW of dependable capacity. Although generation costs would be low, transmission to the Anchorage area would be expensive. Since the Copper River sustains the largest run of salmon of any stream in this part of Alaska, project construction would have a major environmental impact.

25. Woodchopper - This project was also studied briefly by the Corps of Engineers. It is located about 250 mi northeast of Fairbanks on the Yukon River just west of the Canadian border. A dam of about 380 ft would back water to Dawson in Yukon Territory, Canada, and provide a usable storage of about 21.5 million acre-ft. The project would provide about 2500 MW of dependable

capacity at reasonable cost but would require transmission to Fairbanks. Since a major portion of the reservoir would be in Canada, construction of the project would require an international treaty which could result in Canada receiving as much as half the project generation. Because of the large cost, major environmental problems and the international complications, this project, like the very large downstream Rampart project, is not considered appropriate at this time.

SUMMARY

26. Review of the many known alternative hydroelectric power potentials in central Alaska that could be developed to serve the Anchorage-Fairbanks Railbelt Area in the future reveals a wide variety of opportunities to serve the area's electric energy needs through hydroelectric power generation. Additional opportunities may develop as studies continue. As discussed in paragraph 12 above, early decision is necessary on the first project which will be needed as soon as it can be completed. Inherent in that selection, however, is the need to plan for follow-on projects and additional generation for the Railbelt Area if the load forecasts have any validity.

27. Transmission interconnection between Fairbanks and Anchorage appears axiomatic in view of the added flexibility and reliability of service, particularly if the transmission and major elements of generation (hydro or thermal) are operated without bias by a state or Federal agency. Errors in forecast can be adjusted for. Less reserves for scheduled and unscheduled outages will be required. The selection of future additions to the system will be less restricted.

28. It appears that the first hydroproject for development should be either Watana, Devil Canyon or Susitna I. The possible follow-on projects in each case are as follows:

a. Watana - With Watana constructed to full height as recommended by the Corps, the follow-on project would be Devil Canyon as also recommended. After that could be added the Olson and possibly the Denali projects. This would give the most complete utilization of the Susitna hydropower resource.

b. Devil Canyon - With Devil Canyon constructed first, the Watana project could be added either to full height or to a low elevation (about 1905 ft) in order not to flood the upstream Vee site, assuming that it proves adequate for construction of the third element of the system. To either base system could be added the Olson and Denali projects for ultimate development. Some of the advantages of low Watana-Vee system are discussed in paragraph 19.

c. Susitna I - With Susitna I constructed first the follow-on project would be Olson for regulation of the Susitna I discharges. After that could come the Vee (or Susitna II) and the Denali projects. Since none of these project sites have been explored adequately, and Susitna I is contemplated as an 800 ft dam, this system is not immediately available for adoption.

29. It appears, however, that the following systems, in the order listed are the most worthy of further detailed consideration:

- a. Watana (High) and Devil Canyon
- b. Devil Canyon and Watana (Low) and Vee
- c. Susitna I, Olson and Vee

C

APPENDIX C ECOST2 MODEL DOCUMENTATION


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703 FORMAT(1X, 'FUEL SOURCE? ')
704 FORMAT(1X, 'PLANT FINANCING? ')
705 FORMAT(1X, 'FUEL SUPPLY FINANCING? ')
706 FORMAT(1X, 'FGD? ')
101 FORMAT(1X, 'INSTALLED CAPACITY(MW)DP? ')
213 FORMAT(1X, 'DO YOU WANT IDC AND EDC COMPUTED?(YES OR NO)')
102 FORMAT(1X, 'CAPITAL COST($/KW)(1977$)? ')
200 FORMAT(1X, 'FIRST POWER ON LINE DATE(YEAR)? ')
103 FORMAT(1X, 'HEAT RATE(BTU/KWH)? ')
104 FORMAT(1X, 'OPERATIONS AND MAINTANCE COSTS($/KW)(1977$)? ')
105 FORMAT(1X, 'FINANCING DISCOUNT RATE (FRACTION)? ')
106 FORMAT(1X, 'PAYBACK PERIOD (YEARS)? ')
107 FORMAT(1X, 'FACILITY CONSTRUCTION TIME (YEARS)? ')
108 FORMAT(1X, 'INSURANCE RATE (FRACTION)? ')
109 FORMAT(1X, 'TAX RATE (FRACTION)? ')
110 FORMAT(1X, 'INTERIM REPLACEMENT RATE (FRACTION)? ')
111 FORMAT(1X, I2, ' PLANT UTILIZATION FACTORS(FRACTION)? ')
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133 FORMAT(F12.3)
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      ST8,'LINE DATE ',T20,'BUS BAR',T29,'X AMORIT',T40,'OXM',T45,'FUEL'
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139  FORMAT(T10,'I5,T18,'/ ',T20,F6.2,T29,F6.2,T37,5(F6.2,1X))
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755  FORMAT(8A4)
180  FORMAT(1H1/////8X,18A4//)
190  FORMAT(1X,'DO YOU WANT TO CHANGE ALL THE VALUES?')

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C
C
C
C

ACCEPT INPUT VALUES FROM USER.

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      KKL=1
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      ACCEPT 755,CASN
      TYPE 701
      ACCEPT 755,GENT
      TYPE 702
      ACCEPT 755,PLAC
      TYPE 703
      ACCEPT 755,FUELS
      TYPE 704
      ACCEPT 755,PLANF
      TYPE 705
      ACCEPT 755,FUELF
      TYPE 706
      ACCEPT 755,FGD
      TYPE 101
      ACCEPT 133,ICAP
      TYPE 213
      ACCEPT 175,D
      IF(D.EQ.C)FLAG=.TRUE.
      TYPE 102
      ACCEPT 133,CAPC
      TYPE 200
      ACCEPT 133,FPOLD
      TYPE 103
      ACCEPT 133,HEATR
      TYPE 104
      ACCEPT 133,OMC
      TYPE 105
      ACCEPT 333,jR
      TYPE 107
      ACCEPT 133,FCT
      TYPE 106
      ACCEPT 133,PBP

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TYPE 108
ACCEPT 333, INSR
TYPE 109
ACCEPT 333, TAXR
TYPE 110
ACCEPT 333, INTRER
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PUF(I)=0.
II=PBP
II=II/5 + 1
TYPE 111, II
ACCEPT 134, (PUF(I), I=1, II)
IIII=11
TYPE 112, IIII
ACCEPT 143, (UFUELC(I), I=1, 26, 5), (UFUELC(I), I=36, 76, 10)
TYPE 201
ACCEPT 333, GIR
TYPE 202
ACCEPT 333, CER
TYPE 203
ACCEPT 333, FER

C
MM=II-1

C
C
2 GET INTERMEDIATE VALUES FOR PUF AND UFUELC
JJ=1
TEMP(1)=PUF(1)
DO 4 I=1, MM
IF (PUF(I+1) .EQ. 0.) GO TO 5
DO 6 J=1, 4
JJ=JJ+1
6 TEMP(JJ)=(PUF(I+1)-PUF(I))* .2 + TEMP(JJ-1)
JJ=JJ+1
4 TEMP(JJ)=PUF(I+1)
5 DO 7 I=1, 55
7 PUF(I)=TEMP(I)

C
C
77 IF (KKL .EQ. 2 .AND. .NOT. FFUEL) GO TO 33
LM=4
JJ=1
DO 44 I=1, 10
IF (I .GE. 6) LM=9
JJK=JJ
DO 66 J=1, LM
JJ=JJ+1
66 UFUELC(JJ)=(UFUELC(JJK+LM+1)-UFUELC(JJK))/(LM+1) + UFUELC(JJ-1)
44 JJ=JJ+1

C
C
C

```

```

C      COMPUTE THE INTEREST & ESCALATION DURING CONSTRUCTION FACTOR
33     XX=(1+CER)/(1+IR)
      IEDCF=(1+IR)**FCT * .5 * (XX**FCT+1)/(1+(FCT*ALOG(XX)/3.14)**2)
C
C      COMPUTE CAPITAL RECOVERY FACTOR
      IRU=(1+IR)**PBP
      CRF=IR*IRU/(IRU-1.)
C
C      COMPUTE FIXED CHARGE RATE
      FIXCR=INSR+TAXR+INTRER+CRF
C
      IPOLD(1)=FPOLD
      IK=5
C
      DO 300 K=1,5
      IF(IPOLD(K).GE.2005)GO TO 300
C
C      COMPUTE THE ESCALATED CAPITAL COSTS
      IF(.NOT.FLAG)ECAPC(K)=CAPC*(1.+CER)**(IPOLD(K)-1977.)
      IF(.NOT.FLAG)TICOST(K)=ECAPC(K)
      IF(FLAG)ECAPC(K)=CAPC*(1.+CER)**(IPOLD(K)-1977.-FCT)
      IF(FLAG)TICOST(K)=ECAPC(K)*IEDCF
      TCAPC=TICOST(K)*ICAP*1000.
C
C      COMPUTE INTEREST CHARGES (COST OF MONEY).
      INTAM(K)=CRF*TCAPC
C
C      COMPUTE INTERIM REPLACEMENT COST.
      INTRE(K)=INTRER*TCAPC
C
C      COMPUTE ANNUAL INSURANCE COSTS.
      IC(K)=TCAPC*INSR
C
C      COMPUTE ANNUAL TAXES.
      TAXES(K)=TCAPC*TAXR
C
C      COMPUTE ANNUAL FIXED COSTS.
      FIXC(K)=INTAM(K)+INTRE(K)+TAXES(K)+IC(K)
C
      HPY=8760.
      IPBP=MM*5
      PINTAM=0.
      POMC=0.
      PFUELC=0.
      PIC=0.
      PTAXES=0.
      PINTRE=0.
      PEPC=0.
C
      DO 10 I=1,IPBP
C

```

```

C   COMPUTE SOCIAL SINGLE PAYMENT PRESENT WORTH FACTOR--SSPPWF
SSPPWF=1./((1.+0.064)**I)
C   COMPUTE SOCIAL CAPITAL RECOVERY FACTOR--SCRF
SIRU=(1.+0.064)**IPBP
SCRF=.064*SIRU/(SIRU-1.)
C   COMPUTE ELECTRICAL POWER PRODUCTION.
EPPRO(I)=ICAP*PUF(I)*HPY/1.0E3
C
C   COMPUTE ESCALATED FUEL COSTS
EUFUEL(I,K)=UFUELC(IK+I)*(1.+FER)**(IPOLD(K)+I-1-1977)
C   COMPUTE ANNUAL FUEL COST.
EFUELC=HEATR*EPPRO(I)*EUFUEL(I,K)
C
C   COMPUTE ESCALATED O AND M COSTS
EOMC(I,K)=OMC*ICAP*1.0E3*(1.+GIR)**(IPOLD(K)+I-1-1977)
C
C   COMPUTE TOTAL ANNUAL COST.
TAC=EFUELC+FIXC(K)+EOMC(I,K)
C
C   COMPUTE ANNUAL ELECTRICAL POWER COST.
EPC(I,K)=TAC/(EPPRO(I)*1.0E3)
C
C   COMPUTE LEVELIZED ELECTRICAL POWER COST--LEPC
PEPC=PEPC+EPC(I,K)*SSPPWF
LEPC(K)=PEPC*SCRF
C   COMPUTE LEVELIZED INTEREST & AMORTIZATION CHARGES--LINTAM
INTAMP=INTAM(K)/(EPPRO(I)*1.0E3)
PINTAM=PINTAM+INTAMP*SSPPWF
LINTAM(K)=PINTAM*SCRF
C
C   COMPUTE LEVELIZED O&M COSTS--LOMC
EOMCP=EOMC(I,K)/(EPPRO(I)*1.0E3)
POMC=POMC+EOMCP*SSPPWF
LOMC(K)=POMC*SCRF
C
C   COMPUTE LEVELIZED FUEL COSTS--LFUELC
EFUELP=EFUELC/(EPPRO(I)*1.0E3)
PFUELC=PFUELC+EFUELP*SSPPWF
LFUELC(K)=PFUELC*SCRF
C
C   COMPUTE LEVELIZED INSURANCE COSTS--LIC
ICP=IC(K)/(EPPRO(I)*1.0E3)
PIC=PIC+ICP*SSPPWF
LIC(K)=PIC*SCRF
C
C   COMPUTE LEVELIZED TAXES--LTAXES
TAXESP=TAXES(K)/(EPPRO(I)*1.0E3)
PTAXES=PTAXES+TAXESP*SSPPWF
LTAXES(K)=PTAXES*SCRF

```

```

C      COMPUTE LEVELIZED INTERIM REPLACEMENT COSTS--LINTRE
      INTREP=INTRE(K)/(EPRO(I)*1.0E3)
      PINTRE=PINTRE+INTREP*SSPPWF
      LINTRE(K)=PINTRE*SCRF
C
C 10  EOMC(I,K)=EOMC(I,K)/1.0E3
C
C      COMPUTE LEVELIZED ELECTRICAL POWER COST
      LEPC(K)=LOMC(K)+LFUELC(K)+LINTAM(K)+LIC(K)+LTAXES(K)+LINTRE(K)
C
      IK=IK+5
      IF(K.EQ.5)GO TO 300
      IPOLD(K+1)=IPOLD(K)+5
300  CONTINUE
C
C      COMPUTED VALUES ARE OUTPUT TO FILE 3 (EPCOST.OUT)
C
      WRITE(3,710)CASN
      WRITE(3,711)GENT
      WRITE(3,712)PLAC
      WRITE(3,713)FUELS
      WRITE(3,714)PLANF
      WRITE(3,715)FUELF
      WRITE(3,716)FGD
      WRITE(3,114)ICAP
      WRITE(3,115)CAPC
      WRITE(3,204)FPOLD
      WRITE(3,116)HEATR
      WRITE(3,117)OMC
      WRITE(3,118)IR
      WRITE(3,120)FCT
      WRITE(3,119)PBP
      WRITE(3,121)INSR
      WRITE(3,122)TAYR
      WRITE(3,123)INTRER
      IM=MM*5 +1
      WRITE(3,124),(PUF(I),I=1,IM,5)
      WRITE(3,113),(UFUELC(I),I=1,26,5),(UFUELC(I),I=36,76,10)
      WRITE(3,205)GIR
      WRITE(3,206)CER
      WRITE(3,207)FER
      WRITE(3,135)
      WRITE(3,138)
      DO 50 K=1,5
      IF(IPOLD(K).GE.2005)GO TO 55
C
C      WRITE(3,139)IPOLD(K),LEPC(K),LINTAM(K),LOMC(K),LFUELC(K),LIC(K),
      SLTAXES(K),LINTRE(K)
C

```

```
50 CONTINUE
C
C CHECK TO SEE IF USER WANTS TO RERUN PROGRAM
C
55 TYPE 170
ACCEPT 175,B
IF(A.NE.B)STOP
TYPE 190
ACCEPT 175,B
IF(C.EQ.B)GO TO 1
CALL VARIBL(FPUF,FFUEL,MM)
KKL=2
IF(FPUF)GO TO 2
IF(FFUEL)GO TO 77
GO TO 33
END
```

```

SUBROUTINE VARIBL(FPUF,FFUEL,MMM)
COMMON/HAC/SPL
COMMON SL,PUF,UFUELC
DIMENSION SL(14),PUF(55),UFUELC(80),SP(56)
LOGICAL FLAG,FPUF,FFUEL
DOUBLE PRECISION VAR(16),VIN,EN,VAP(7)
DATA VAR/4HCAP,4HCAPC,5HFPOLD,5HHEATR,3HOMC,2HIR,3HFCT,
$3HPBP,4HINSR,4HTAXR,6HINTRER,3HGIR,3HCER,3HFER,
$3HPUF,6HUFUELC/
DATA VAP/4HCASN,4HGENT,4HPLAC,5HFUELS,5HPLANF,5HFUELF,3HFGD/
DATA EN/3HEND/
190 FORMAT(8A4)
177 FORMAT(14(F4.2,1X))
175 FORMAT(14(F5.2,1X))
150 FORMAT(14F12.3)
110 FORMAT(4X,A8,'I-',I2,' =?')
105 FORMAT(4X,A8,' =?')
100 FORMAT(A8)
90  FORMAT(1X,'VARIABLE TO BE CHANGED ?')
M=SL(8)/5 + 1
MM=11
FFUEL=.FALSE.
FPUF=.FALSE.
1  FLAG=.FALSE.
TYPE 90
ACCEPT 100,VIN
DO 50 I=1,16
J=I
IF(VIN.EQ.VAR(I))FLAG=.TRUE.
IF(FLAG.AND.I.EQ.15) GO TO 20
IF(FLAG.AND.I.EQ.16) GO TO 30
IF(FLAG) GO TO 40
IF(VIN.EQ.EN)RETURNL
IF(VIN.EQ.VAP(I)) GO TO 60
50 CONTINUE
GO TO 1
60 TYPE 105,VAP(J)
NJ=(J-1)*8+1
NJK=J*8
ACCEPT 190,(SP(I),I=NJ,NJK)
GO TO 1
40 TYPE 105,VAR(I)
ACCEPT 150,SL(J)
IF(I.EQ.8)M=SL(8)/5 + 1
IF(I.EQ.8)MMM=M-1
IF(I.EQ.8)GO TO 20
GO TO 1
30 TYPE 110,VAR(I),MM
ACCEPT 175,(UFUELC(K),K=1,26,5),(UFUELC(K),K=36,76,10)
FFUEL=.TRUE.
GO TO 1
20 TYPE 110,VAR(15),M
ACCEPT 177,(PUF(I),I=1,M)
PUF(M+1)=0.0
FPUF=.TRUE.
GO TO 1
END

```

ECOST2 PARAMETER DEFINITIONS

CASN - Case Number (1-43)
GENT - Generation Type (Coal, steam, turbine, hydro, etc.)
PLAC - Location of Plant (Beluga, North Pole, etc.)
FUELS - Fuel Source (Beluga, Healy, etc.)
PLANF - Plant Financing (APA, Munic., etc.)
FUELF - Fuel Supply Financing (APA, Private)
FGD - Flue Gas Desulfurization (Yes or No)
ICAP - Installed Capacity (MW)
CAPC - Capital Costs (\$/KW)(1977\$)
FPOLD - First Power on Line Date (1980 in all cases)
HEATR - Heat Rate (Btu/KWh)
OMC - Operating and Maintenance Costs (\$/KW)(1977\$)
IR - Financing Discount Rate (%)
FCT - Facility Construction Time (Years)
PBP - Pay-Back Period (Years)
INSR - Insurance Rate (%)
TAXR - Tax Rate (%)
INTRER - Interim Replacement Rate (%)
UFUELC - Unit Fuel Cost (\$/MMBtu)
PUF - Plant Utilization Factor (%)
GIR - General Inflation Rate (%)
CER - Construction Escalation Rate (%)
FER - Fuel Escalation Rate (%)
IEDCF - Interest & Escalation During Construction Factor (%)
CRF - Capital Recovery Factor (Dim'less)
FIXCR - Fixed Charge Rate (%)
ECAPC - Escalated Capital Costs (\$/KW)
TICOST - Total Investment Costs (\$/KW)
TCAPC - Total Capital Costs (\$)
INTAM - Interest and Amortization Charges (\$/Year)
INTRE - Interim Replacement Cost (\$/Year)
IC - Insurance Costs (\$/Year)
TAXES - Annual Taxes or Payments in Lieu of Taxes (\$/Year)

FIXC - Annual Fixed Costs (\$/Year)
HPY - Hours per Year (8760)
SSPPWF - Social Single Payment Present Worth Factor (Dim'less)
SCRF - Social Capital Recovery Factor (Dim'less)
EPPRO - Electrical Power Production (MMKWh)
EUFUEL - Escalated Unit Fuel Costs (\$/MMBtu)
EFUELC - Annual Fuel Costs (\$)
EOMC - Escalated Operation and Maintenance Costs (\$/KW)
TAC - Total Annual Costs (\$/Year)
EPC - Electric Power Costs (Mills/KWh)
PEPC - Present Worth Electrical Power Cost (Mills/KWh)
LEPC - Levelized Electric Power Costs (Mills/KWh)
INTAMP - Annual Interest and Amortization Costs per KWh (Mills/KWh)
PINTAM - Present Worth Interest and Amortization Costs (Mills/KWh)
LINTAM - Levelized Interest and Amortization Costs (Mills/KWh)
EOMCP - Annual O&M Costs per KWh (Mills/KWh)
POMC - Present Worth O&M Costs (Mills/KWh)
LOMC - Levelized O&M Costs (Mills/KWh)
EFUELP - Annual Fuel Costs per KWh (Mills/KWh)
PFUELC - Present Worth Fuel Costs (Mills/KWh)
LFUELC - Levelized Fuel Costs (Mills/KWh)
ICP - Annual Insurance Costs per KWh (Mills/KWh)
PIC - Present Worth Insurance Costs (Mills/KWh)
LIC - Levelized Insurance Costs (Mills/KWh)
TAXESP - Annual Taxes per KWh (Mills/KWh)
PTAXES - Present Worth Taxes (Mills/KWh)
LTAXES - Levelized Taxes (Mills/KWh)
INTREP - Annual Interim Replacement Cost per KWh (Mills/KWh)
PINTRE - Present Worth Interim Replacement Costs (Mills/KWh)
LINTRE - Levelized Interim Replacement Costs (Mills/KWh)

D

APPENDIX D POWER COST COMPUTATION DETAILS

0% INFLATION

CASE NUMBER-- 3 - 0% INFLATION
 GENERATION TYPE-- COAL STEAM TURBINE
 LOCATION-- BELUGA
 FUEL SOURCE-- BELUGA
 PLANT FINANCING-- APA
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- YES
 INSTALLED CAPACITY (MW)= 200.00
 CAPITAL COSTS(\$/KW)(1977\$)= 1400.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 10500.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 13.20
 FINANCING DISCOUNT RATE(FRACTION)= 0.02800
 FACILITY CONSTRUCTION TIME(YEARS)= 5.
 PAYBACK PERIOD (YEARS)= 35.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.20,0.75,0.75,0.75,0.75,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 1.00, 1.00, 1.00, 1.00, 1.00, 1.00, 1.00, 1.00, 1.00, 1.00,
 GENERAL INFLATION RATE(FRACTION)= 0.0000
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0250
 FUEL ESCALATION RATE(FRACTION)= 0.0300

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	0%M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	38.60	14.78	2.84	16.56	0.82	2.45	1.14
1985 /	43.76	16.73	2.84	19.19	0.93	2.78	1.30
1990 /	49.67	18.92	2.84	22.25	1.05	3.14	1.47
1995 /	56.44	21.41	2.84	25.79	1.18	3.55	1.66
2000 /	64.20	24.22	2.84	29.90	1.34	4.02	1.88

CASE NUMBER-- 4 - 0% INFLATION
 GENERATION TYPE-- COAL STEAM TURBINE
 LOCATION-- BELUGA
 FUEL SOURCE-- BELUGA
 PLANT FINANCING-- APA
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- NO
 INSTALLED CAPACITY (MW)= 200.00
 CAPITAL COSTS(\$/KW)(1977\$)= 1220.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 10000.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 10.10
 FINANCING DISCOUNT RATE(FRACTION)= 0.02800
 FACILITY CONSTRUCTION TIME(YEARS)= 5.
 PAYBACK PERIOD (YEARS)= 35.1
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.20,0.75,0.75,0.75,0.75,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 1.00, 1.00, 1.00, 1.00, 1.00, 1.00, 1.00, 1.00, 1.00, 1.00,
 GENERAL INFLATION RATE(FRACTION)= 0.0000
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0250
 FUEL ESCALATION RATE(FRACTION)= 0.0300

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	0%M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	34.67	12.88	2.18	15.77	0.71	2.14	1.00
1985 /	39.38	14.58	2.18	18.28	0.81	2.42	1.13
1990 /	44.78	16.49	2.18	21.19	0.91	2.74	1.28
1995 /	50.97	18.66	2.18	24.56	1.03	3.10	1.45
2000 /	58.07	21.11	2.18	28.48	1.17	3.50	1.63

CASE NUMBER-- 7 - 0% INFLATION
 GENERATION TYPE-- COAL STEAM TURBINE
 LOCATION-- BELUGA
 FUEL SOURCE-- BELUGA
 PLANT FINANCING-- REA
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- YES
 INSTALLED CAPACITY (MW)= 200.00
 CAPITAL COSTS(\$/KW)(1977\$)= 1400.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 10500.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 13.20
 FINANCING DISCOUNT RATE(FRACTION)= 0.04500
 FACILITY CONSTRUCTION TIME(YEARS)= 5.
 PAYBACK PERIOD (YEARS)= 35.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.20,0.75,0.75,0.75,0.75,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 1.00, 1.00, 1.00, 1.00, 1.00, 1.00, 1.00, 1.00, 1.00, 1.00,
 GENERAL INFLATION RATE(FRACTION)= 0.0000
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0250
 FUEL ESCALATION RATE(FRACTION)= 0.0300

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	0%M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	43.52	19.52	2.84	16.56	0.85	2.56	1.19
1985 /	49.33	22.09	2.84	19.19	0.96	2.89	1.35
1990 /	55.97	24.99	2.84	22.25	1.09	3.27	1.53
1995 /	62.58	28.28	2.84	25.79	1.23	3.70	1.73
2000 /	72.28	31.99	2.84	29.90	1.40	4.19	1.96

CASE NUMBER-- 8 - 0% INFLATION
 GENERATION TYPE-- COAL STEAM TURBINE
 LOCATION-- BELUGA
 FUEL SOURCE-- BELUGA
 PLANT FINANCING-- REA
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- NO
 INSTALLED CAPACITY (MW)= 200.00
 CAPITAL COSTS(\$/KW)(1977\$)= 1220.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 10000.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 10.10
 FINANCING DISCOUNT RATE(FRACTION)= 0.04500
 FACILITY CONSTRUCTION TIME(YEARS)= 5.
 PAYBACK PERIOD (YEARS)= 35.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.20,0.75,0.75,0.75,0.75,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 1.00, 1.00, 1.00, 1.00, 1.00, 1.00, 1.00, 1.00, 1.00, 1.00,
 GENERAL INFLATION RATE(FRACTION)= 0.0000
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0250
 FUEL ESCALATION RATE(FRACTION)= 0.0300

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	0%M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	38.97	17.01	2.18	15.77	0.74	2.23	1.04
1985 /	44.24	19.25	2.18	18.28	0.84	2.52	1.18
1990 /	50.28	21.78	2.18	21.19	0.95	2.85	1.33
1995 /	57.19	24.64	2.18	24.56	1.08	3.23	1.51
2000 /	65.10	27.88	2.18	28.48	1.22	3.65	1.70

CASE NUMBER-- 11 - 0% INFLATION
 GENERATION TYPE-- COAL STEAM TURBINE
 LOCATION-- ANCHORAGE
 FUEL SOURCE-- HEALY
 PLANT FINANCING-- APA
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- YES
 INSTALLED CAPACITY (MW)= 200.00
 CAPITAL COSTS(\$/KW)(1977S)= 1280.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 10500.
 OPERATING AND MAINTNANCE COSTS(\$/KW)(1977S)= 10.50
 FINANCING DISCOUNT RATE(FRACTION)= 0.02800
 FACILITY CONSTRUCTION TIME(YEARS)= 5.
 PAYBACK PERIOD (YEARS)= 35.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.20,0.75,0.75,0.75,0.75,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10,
 GENERAL INFLATION RATE(FRACTION)= 0.0000
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0250
 FUEL ESCALATION RATE(FRACTION)= 0.0300

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	OXM	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	38.03	13.52	2.26	18.21	0.75	2.24	1.05
1985 /	43.23	15.29	2.26	21.11	0.85	2.54	1.18
1990 /	49.21	17.30	2.26	24.47	0.96	2.87	1.34
1995 /	56.06	19.58	2.26	28.37	1.08	3.25	1.52
2000 /	63.92	22.15	2.26	32.89	1.23	3.66	1.72

CASE NUMBER-- 12 - 0% INFLATION
 GENERATION TYPE-- COAL STEAM TURBINE
 LOCATION-- ANCHORAGE
 FUEL SOURCE-- HEALY
 PLANT FINANCING-- APA
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- NO
 INSTALLED CAPACITY (MW)= 200.00
 CAPITAL COSTS(\$/KW)(1977\$)= 1120.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 10000.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 8.10
 FINANCING DISCOUNT RATE(FRACTION)= 0.02800
 FACILITY CONSTRUCTION TIME(YEARS)= 5.
 PAYBACK PERIOD (YEARS)= 35.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.20,0.75,0.75,0.75,0.75,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10,
 GENERAL INFLATION RATE(FRACTION)= 0.0000
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0250
 FUEL ESCALATION RATE(FRACTION)= 0.0300

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	0%M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	34.45	11.83	1.74	17.34	0.65	1.96	0.92
1985 /	39.23	13.38	1.74	20.11	0.74	2.22	1.04
1990 /	44.71	15.14	1.74	23.31	0.84	2.51	1.17
1995 /	51.01	17.13	1.74	27.02	0.95	2.84	1.33
2000 /	58.24	19.38	1.74	31.32	1.07	3.22	1.50

CASE NUMBER-- 13 - 0% INFLATION
 GENERATION TYPE-- COAL STEAM TURBINE
 LOCATION-- ANCHORAGE
 FUEL SOURCE-- HEALY
 PLANT FINANCING-- REA
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- YES
 INSTALLED CAPACITY (MW)= 200.00
 CAPITAL COSTS(\$/KW)(1977\$)= 1280.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 10500.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 10.50
 FINANCING DISCOUNT RATE(FRACTION)= 0.04500
 FACILITY CONSTRUCTION TIME(YEARS)= 5.
 PAYBACK PERIOD (YEARS)= 35.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.20,0.75,0.75,0.75,0.75,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10,
 GENERAL INFLATION RATE(FRACTION)= 0.0000
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0250
 FUEL ESCALATION RATE(FRACTION)= 0.0300

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	O&M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	42.53	17.85	2.26	18.21	0.78	2.34	1.09
1985 /	48.73	20.20	2.26	21.11	0.88	2.64	1.23
1990 /	54.97	22.85	2.26	24.47	1.00	2.99	1.40
1995 /	62.58	25.85	2.26	28.37	1.13	3.39	1.58
2000 /	71.30	29.25	2.25	32.89	1.28	3.83	1.79

CASE NUMBER-- 14 - 0% INFLATION
 GENERATION TYPE-- COAL STEAM TURBINE
 LOCATION-- ANCHORAGE
 FUEL SOURCE-- HEALY
 PLANT FINANCING-- REA
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- NO
 INSTALLED CAPACITY (MW)= 200.00
 CAPITAL COSTS(\$/KW)(1977\$)= 1120.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 10000.
 OPERATING AND MAINTNANCE COSTS(\$/KW)(1977\$)= 8.10
 FINANCING DISCOUNT RATE(FRACTION)= 0.04500
 FACILITY CONSTRUCTION TIME(YEARS)= 5.
 PAYBACK PERIOD (YEARS)= 35.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.20,0.75,0.75,0.75,0.75,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10,
 GENERAL INFLATION RATE(FRACTION)= 0.0000
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0250
 FUEL ESCALATION RATE(FRACTION)= 0.0300

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	0%M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	32.39	15.62	1.74	17.34	0.68	2.05	0.95
1985 /	43.69	17.67	1.74	20.11	0.77	2.31	1.08
1990 /	49.76	19.99	1.74	23.31	0.87	2.62	1.22
1995 /	56.72	22.62	1.74	27.02	0.99	2.96	1.38
2000 /	64.69	25.59	1.74	31.32	1.12	3.35	1.56

CASE NUMBER-- 15 - 0% INFLATION
 GENERATION TYPE-- COAL STEAM TURBINE
 LOCATION-- ANCHORAGE
 FUEL SOURCE-- HEALY
 PLANT FINANCING-- MUNIC.
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- YES
 INSTALLED CAPACITY (MW)= 200.00
 CAPITAL COSTS(\$/KW)(1977\$)= 1280.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 10500.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 10.50
 FINANCING DISCOUNT RATE(FRACTION)= 0.03100
 FACILITY CONSTRUCTION TIME(YEARS)= 5.
 PAYBACK PERIOD (YEARS)= 35.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.20,0.75,0.75,0.75,0.75,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10,
 GENERAL INFLATION RATE(FRACTION)= 0.0000
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0250
 FUEL ESCALATION RATE(FRACTION)= 0.0300

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	O&M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	38.77	14.23	2.26	18.21	0.75	2.26	1.05
1985 /	44.07	16.10	2.26	21.11	0.85	2.56	1.19
1990 /	50.15	18.21	2.26	24.47	0.96	2.89	1.35
1995 /	57.13	20.61	2.26	29.37	1.09	3.27	1.53
2000 /	65.13	23.31	2.26	32.89	1.23	3.70	1.73

CASE NUMBER-- 16 - 0% INFLATION
 GENERATION TYPE-- COAL STEAM TURBINE
 LOCATION-- ANCHORAGE
 FUEL SOURCE-- HEALY
 PLANT FINANCING-- MUNIC.
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- NO
 INSTALLED CAPACITY (MW)= 200.00
 CAPITAL COSTS(\$/KW)(1977\$)= 1120.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 10000.
 OPERATING AND MAINTNANCE COSTS(\$/KW)(1977\$)= 8.10
 FINANCING DISCOUNT RATE(FRACTION)= 0.03100
 FACILITY CONSTRUCTION TIME(YEARS)= 5.
 PAYBACK PERIOD (YEARS)= 35.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.20,0.75,0.75,0.75,0.75,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10,
 GENERAL INFLATION RATE(FRACTION)= 0.0000
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0250
 FUEL ESCALATION RATE(FRACTION)= 0.0300

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	Q%M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	35.10	12.45	1.74	17.34	0.66	1.98	0.92
1985 /	39.96	14.08	1.74	20.11	0.75	2.24	1.04
1990 /	45.54	15.94	1.74	23.31	0.84	2.53	1.18
1995 /	51.95	18.03	1.74	27.02	0.95	2.86	1.34
2000 /	59.30	20.40	1.74	31.32	1.08	3.24	1.51

CASE NUMBER-- 17 - 0% INFLATION
 GENERATION TYPE-- COAL STEAM TURBINE
 LOCATION-- ANCHORAGE
 FUEL SOURCE-- HEALY
 PLANT FINANCING-- APA
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- YES
 INSTALLED CAPACITY (MW)= 400.00
 CAPITAL COSTS(\$/KW)(1977\$)= 1150.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 10500.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 11.40
 FINANCING DISCOUNT RATE(FRACTION)= 0.02800
 FACILITY CONSTRUCTION TIME(YEARS)= 5.
 PAYBACK PERIOD (YEARS)= 35.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.20,0.75,0.75,0.75,0.75,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10,
 GENERAL INFLATION RATE(FRACTION)= 0.0000
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0250
 FUEL ESCALATION RATE(FRACTION)= 0.0300

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	02M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	36.44	12.14	2.46	18.21	0.67	2.02	0.94
1985 /	41.41	13.74	2.46	21.11	0.76	2.28	1.06
1990 /	47.12	15.54	2.46	24.47	0.86	2.58	1.20
1995 /	53.67	17.59	2.46	28.37	0.97	2.92	1.30
2000 /	61.19	19.90	2.46	32.89	1.10	3.30	1.54

CASE NUMBER-- 18 - 0% INFLATION
 GENERATION TYPE-- COAL STEAM TURBINE
 LOCATION-- ANCHORAGE
 FUEL SOURCE-- HEALY
 PLANT FINANCING-- APA
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- YES
 INSTALLED CAPACITY (MW)= 100.00
 CAPITAL COSTS(\$/KW)(1977\$)= 1688.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 10500.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 12.80
 FINANCING DISCOUNT RATE(FRACTION)= 0.02800
 FACILITY CONSTRUCTION TIME(YEARS)= 4.
 PAYBACK PERIOD (YEARS)= 35.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.20,0.75,0.75,0.75,0.75,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10,
 GENERAL INFLATION RATE(FRACTION)= 0.0000
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0250
 FUEL ESCALATION RATE(FRACTION)= 0.0300

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	0%M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	40.08	17.80	2.76	18.21	0.98	2.95	1.38
1985 /	50.02	20.14	2.76	21.11	1.11	3.34	1.56
1990 /	56.82	22.78	2.76	24.47	1.26	3.78	1.76
1995 /	64.61	25.78	2.76	28.37	1.43	4.28	2.00
2000 /	73.52	29.16	2.76	32.89	1.61	4.84	2.26

CASE NUMBER-- 19 - 0% INFLATION
 GENERATION TYPE-- GAS COMBINED CYCLE
 LOCATION-- COOK INLET
 FUEL SOURCE-- COOK INLET
 PLANT FINANCING-- APA
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- N.A.
 INSTALLED CAPACITY (MW)= 100.00
 CAPITAL COSTS(\$/KW)(1977\$)= 300.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 9000.
 OPERATING AND MAINTNANCE COSTS(\$/KW)(1977\$)= 9.40
 FINANCING DISCOUNT RATE(FRACTION)= 0.02800
 FACILITY CONSTRUCTION TIME(YEARS)= 2.
 PAYBACK PERIOD (YEARS)= 30.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.40,0.60,0.60,0.60,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 2.00, 2.00, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47,
 GENERAL INFLATION RATE(FRACTION)= 0.0000
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0250
 FUEL ESCALATION RATE(FRACTION)= 0.0300

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	O&M	FUEL	INSUR.	TAXES	INTERM SEP.
1980 /	39.10	3.42	1.99	32.76	0.17	0.52	0.24
1985 /	45.99	3.87	1.99	33.08	0.19	0.58	0.27
1990 /	52.86	4.38	1.99	45.30	0.22	0.66	0.31
1995 /	60.80	4.95	1.99	52.52	0.25	0.75	0.35
2000 /	70.00	5.60	1.99	60.88	0.28	0.84	0.39

CASE NUMBER-- 20 - 0% INFLATION
 GENERATION TYPE-- GAS COMBINED CYCLE
 LOCATION-- COOK INLET
 FUEL SOURCE-- COOK INLET
 PLANT FINANCING-- REA
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- N.A.
 INSTALLED CAPACITY (MW)= 100.00
 CAPITAL COSTS(\$/KW)(1977\$)= 300.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 9000.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 9.40
 FINANCING DISCOUNT RATE(FRACTION)= 0.04500
 FACILITY CONSTRUCTION TIME(YEARS)= 2.
 PAYBACK PERIOD (YEAPS)= 30.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.40,0.60,0.60,0.60,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 2.00, 2.00, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47,
 GENERAL INFLATION RATE(FRACTION)= 0.0000
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0250
 FUEL ESCALATION RATE(FRACTION)= 0.0300

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	OZM	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	39.99	4.29	1.99	32.76	0.17	0.52	0.24
1985 /	46.99	4.85	1.99	39.08	0.20	0.59	0.28
1990 /	54.00	5.49	1.99	45.30	0.22	0.67	0.31
1995 /	62.09	6.21	1.99	52.52	0.25	0.76	0.35
2000 /	71.45	7.03	1.99	60.88	0.29	0.86	0.40

CASE NUMBER-- 21 - 0% INFLATION
 GENERATION TYPE-- GAS COMBINED CYCLE
 LOCATION-- COOK INLET
 FUEL SOURCE-- COOK INLET
 PLANT FINANCING-- MUNIC.
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- N.A.
 INSTALLED CAPACITY (MW)= 100.00
 CAPITAL COSTS(\$/KW)(1977\$)= 300.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 9000.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 9.40
 FINANCING DISCOUNT RATE(FRACTION)= 0.03100
 FACILITY CONSTRUCTION TIME(YEARS)= 2.
 PAYBACK PERIOD (YEARS)= 30.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.40,0.60,0.60,0.60,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 2.00, 2.00, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47,
 GENERAL INFLATION RATE(FRACTION)= 0.0000
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0250
 FUEL ESCALATION RATE(FRACTION)= 0.0300

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON LINE DATE	/	TOTAL BUS BAR	INTEREST % AMORIT	0%M	FUEL	INSUR.	TAXES	INTERM REP.
1980	/	39.25	3.55	1.99	32.76	0.17	0.52	0.24
1985	/	46.16	4.03	1.99	39.08	0.20	0.59	0.27
1990	/	53.05	4.56	1.99	45.36	0.22	0.66	0.31
1995	/	61.02	5.16	1.99	52.52	0.25	0.73	0.35
2000	/	70.24	5.84	1.99	60.88	0.28	0.83	0.40

CASE NUMBER-- 22 - 0% INFLATION
 GENERATION TYPE-- OIL COMBINED CYCLE
 LOCATION-- COOK INLET
 FUEL SOURCE-- COOK INLET
 PLANT FINANCING-- APA
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- N.A.
 INSTALLED CAPACITY (MW)= 100.00
 CAPITAL COSTS(\$/KW)(1977\$)= 300.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 8700.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 9.40
 FINANCING DISCOUNT RATE(FRACTION)= 0.02800
 FACILITY CONSTRUCTION TIME(YEARS)= 2.
 PAYBACK PERIOD (YEARS)= 30.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.40,0.60,0.60,0.60,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 2.25, 2.25, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47,
 GENERAL INFLATION RATE(FRACTION)= 0.0000
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0250
 FUEL ESCALATION RATE(FRACTION)= 0.0300

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	OXM	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	32.50	3.42	1.99	32.16	0.17	0.52	0.24
1985 /	44.69	3.87	1.99	37.77	0.19	0.58	0.27
1990 /	51.35	4.38	1.99	43.79	0.22	0.66	0.31
1995 /	59.05	4.95	1.99	50.76	0.25	0.75	0.35
2000 /	67.97	5.60	1.99	58.85	0.28	0.84	0.39

CASE NUMBER-- 23 - 0% INFLATION
 GENERATION TYPE-- OIL COMBINED CYCLE
 LOCATION-- COOK INLET
 FUEL SOURCE-- COOK INLET
 PLANT FINANCING-- REA
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- N.A.
 INSTALLED CAPACITY (MW)= 100.00
 CAPITAL COSTS(\$/KW)(1977\$)= 300.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 8700.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 9.40
 FINANCING DISCOUNT RATE(FRACTION)= 0.04500
 FACILITY CONSTRUCTION TIME(YEARS)= 2.
 PAYBACK PERIOD (YEARS)= 30.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.40,0.60,0.60,0.60,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 2.25, 2.25, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47,
 GENERAL INFLATION RATE(FRACTION)= 0.0000
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0250
 FUEL ESCALATION RATE(FRACTION)= 0.0300

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	0%M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	39.38	4.29	1.99	32.16	0.17	0.52	0.24
1985 /	45.69	4.85	1.99	37.77	0.20	0.59	0.28
1990 /	52.49	5.49	1.99	43.79	0.22	0.67	0.31
1995 /	60.34	6.21	1.99	50.76	0.25	0.76	0.35
2000 /	69.42	7.03	1.99	58.85	0.29	0.86	0.40

CASE NUMBER-- 24 - 0% INFLATION
 GENERATION TYPE-- OIL COMBINED CYCLE
 LOCATION-- COOK INLET
 FUEL SOURCE-- COOK INLET
 PLANT FINANCING-- MUNIC.
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- N.A.
 INSTALLED CAPACITY (MW)= 100.00
 CAPITAL COSTS(\$/KW)(1977\$)= 300.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 8700.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 9.40
 FINANCING DISCOUNT RATE(FRACTION)= 0.03100
 FACILITY CONSTRUCTION TIME(YEARS)= 2.
 PAYBACK PERIOD (YEARS)= 30.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.40,0.60,0.60,0.60,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 2.25, 2.25, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47,
 GENERAL INFLATION RATE(FRACTION)= 0.0000
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0250
 FUEL ESCALATION RATE(FRACTION)= 0.0300

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL RUS BAR	INTEREST % AMORIT	O&M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	38.64	3.56	1.99	32.16	0.17	0.52	0.24
1985 /	44.85	4.03	1.99	37.77	0.20	0.59	0.27
1990 /	51.54	4.56	1.99	43.79	0.22	0.66	0.31
1995 /	59.27	5.16	1.99	50.76	0.25	0.75	0.35
2000 /	68.21	5.84	1.99	58.65	0.28	0.85	0.40

CASE NUMBER-- 25 - 0% INFLATION
 GENERATION TYPE-- COAL STEAM TURBINE
 LOCATION-- HEALY
 FUEL SOURCE-- HEALY
 PLANT FINANCING-- REA/MUNIC.
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- YES
 INSTALLED CAPACITY (MW)= 200.00
 CAPITAL COSTS(\$/KW)(1977\$)= 1710.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 10500.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 10.50
 FINANCING DISCOUNT RATE(FRACTION)= 0.04180
 FACILITY CONSTRUCTION TIME(YEARS)= 5.
 PAYBACK PERIOD (YEARS)= 35.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.20, 0.75, 0.75, 0.75, 0.75, 0.60, 0.50, 0.40,
 UNIT FUEL COST (\$/MMBTU)
 0.70, 0.70, 0.70, 0.70, 0.70, 0.70, 0.70, 0.70, 0.70, 0.70,
 GENERAL INFLATION RATE(FRACTION)= 0.0000
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0250
 FUEL ESCALATION RATE(FRACTION)= 0.0300

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	0%M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	45.11	22.68	2.26	11.59	1.03	3.10	1.45
1985 /	47.67	25.66	2.26	13.43	1.17	3.51	1.64
1990 /	50.01	29.03	2.26	15.57	1.32	3.97	1.85
1995 /	61.24	32.85	2.26	18.05	1.50	4.49	2.09
2000 /	69.50	37.17	2.26	20.93	1.69	5.08	2.37

CASE NUMBER-- 26 - 0% INFLATION
 GENERATION TYPE-- COAL STEAM TURBINE
 LOCATION-- HEALY
 FUEL SOURCE-- HEALY
 PLANT FINANCING-- REA/MUNIC.
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- NO
 INSTALLED CAPACITY (MW)= 200.00
 CAPITAL COSTS(\$/KW)(1977\$)= 1470.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 10000.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 8.10
 FINANCING DISCOUNT RATE(FRACTION)= 0.04180
 FACILITY CONSTRUCTION TIME(YEARS)= 5.
 PAYBACK PERIOD (YEARS)= 35.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.20,0.75,0.75,0.75,0.75,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 0.70, 0.70, 0.70, 0.70, 0.70, 0.70, 0.70, 0.70, 0.70, 0.70, 0.70,
 GENERAL INFLATION RATE(FRACTION)= 0.0000
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0250
 FUEL ESCALATION RATE(FRACTION)= 0.0300

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	0%M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	37.07	19.50	1.74	11.04	0.89	2.66	1.24
1985 /	42.02	22.06	1.74	12.79	1.00	3.01	1.41
1990 /	47.67	24.96	1.74	14.83	1.14	3.41	1.59
1995 /	54.12	28.24	1.74	17.19	1.29	3.86	1.80
2000 /	61.48	31.95	1.74	19.93	1.46	4.37	2.04

CASE NUMBER-- 27 - 0% INFLATION
 GENERATION TYPE-- COAL STEAM TURBINE
 LOCATION-- NENANA
 FUEL SOURCE-- HEALY
 PLANT FINANCING-- REA/MUNIC.
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- YES
 INSTALLED CAPACITY (MW)= 200.00
 CAPITAL COSTS(\$/KW)(1977\$)= 1710.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 10500.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 10.50
 FINANCING DISCOUNT RATE(FRACTION)= 0.04180
 FACILITY CONSTRUCTION TIME(YEARS)= 5.
 PAYBACK PERIOD (YEARS)= 35.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.20,0.75,0.75,0.75,0.75,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 0.91, 0.91, 0.91, 0.91, 0.91, 0.91, 0.91, 0.91, 0.91, 0.91,
 GENERAL INFLATION RATE(FRACTION)= 0.0000
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0250
 FUEL ESCALATION RATE(FRACTION)= 0.0300

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	OxM	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	45.59	22.68	2.26	15.07	1.03	3.10	1.45
1985 /	51.70	25.66	2.26	17.46	1.17	3.51	1.64
1990 /	58.68	29.03	2.26	20.25	1.32	3.97	1.85
1995 /	66.66	32.85	2.26	23.47	1.50	4.49	2.09
2000 /	75.78	37.17	2.26	27.21	1.69	5.08	2.37

CASE NUMBER-- 28 - 0% INFLATION
 GENERATION TYPE-- COAL STEAM TURBINE
 LOCATION-- NENANA
 FUEL SOURCE-- HEALY
 PLANT FINANCING-- REA/MUNIC.
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- NO
 INSTALLED CAPACITY (MW)= 200.00
 CAPITAL COSTS(\$/KW)(1977\$)= 1470.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 10000.
 OPERATING AND MAINTANGE COSTS(\$/KW)(1977\$)= 8.10
 FINANCING DISCOUNT RATE(FRACTION)= 0.04180
 FACILITY CONSTRUCTION TIME(YEARS)= 5.
 PAYBACK PERIOD (YEARS)= 35.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.20,0.75,0.75,0.75,0.75,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 0.91, 0.91, 0.91, 0.91, 0.91, 0.91, 0.91, 0.91, 0.91, 0.91,
 GENERAL INFLATION RATE(FRACTION)= 0.0000
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0250
 FUEL ESCALATION RATE(FRACTION)= 0.0300

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	0% OXM	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	46.39	19.50	1.74	14.35	0.89	2.66	1.24
1985 /	45.86	22.06	1.74	16.63	1.00	3.01	1.41
1990 /	52.12	24.96	1.74	19.28	1.14	3.41	1.59
1995 /	59.28	28.24	1.74	22.35	1.29	3.86	1.80
2000 /	67.46	31.95	1.74	25.91	1.46	4.37	2.04

CASE NUMBER-- 29 - 0% INFLATION
 GENERATION TYPE-- COAL STEAM TURBINE
 LOCATION-- NENANA
 FUEL SOURCE-- HEALY
 PLANT FINANCING-- APA
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- YES
 INSTALLED CAPACITY (MW)= 200.00
 CAPITAL COSTS(\$/KW)(1977\$)= 1710.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 10500.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 10.50
 FINANCING DISCOUNT RATE(FRACTION)= 0.02800
 FACILITY CONSTRUCTION TIME(YEARS)= 5.
 PAYBACK PERIOD (YEARS)= 35.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.20,0.75,0.75,0.75,0.75,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 0.91, 0.91, 0.91, 0.91, 0.91, 0.91, 0.91, 0.91, 0.91,
 GENERAL INFLATION RATE(FRACTION)= 0.0000
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0250
 FUEL ESCALATION RATE(FRACTION)= 0.0300

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	O%M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	40.78	18.06	2.26	15.07	1.00	3.00	1.40
1985 /	46.26	20.43	2.26	17.46	1.13	3.39	1.58
1990 /	52.53	23.11	2.26	20.25	1.28	3.84	1.79
1995 /	59.70	26.15	2.26	23.47	1.45	4.34	2.03
2000 /	67.90	29.59	2.26	27.21	1.64	4.91	2.29

CASE NUMBER-- 30 - 0% INFLATION
 GENERATION TYPE-- COAL STEAM TURBINE
 LOCATION-- NENANA
 FUEL SOURCE-- HEALY
 PLANT FINANCING-- APA
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- NO
 INSTALLED CAPACITY (MW)= 200.00
 CAPITAL COSTS(\$/KW)(1977\$)= 1470.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 10000.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 8.10
 FINANCING DISCOUNT RATE(FRACTION)= 0.02800
 FACILITY CONSTRUCTION TIME(YEARS)= 5.
 PAYBACK PERIOD (YEARS)= 35.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.20,0.75,0.75,0.75,0.75,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 0.91, 0.91, 0.91, 0.91, 0.91, 0.91, 0.91, 0.91, 0.91, 0.91, 0.91,
 GENERAL INFLATION RATE(FRACTION)= 0.0000
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0250
 FUEL ESCALATION RATE(FRACTION)= 0.0300

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	0% FUEL	INSUR.	TAXES	INTERM REP.	
1980 /	36.25	15.52	1.74	14.35	0.86	2.58	1.20
1985 /	41.19	17.56	1.74	16.63	0.97	2.91	1.36
1990 /	46.83	19.87	1.74	19.28	1.10	3.30	1.54
1995 /	53.30	22.48	1.74	22.35	1.24	3.73	1.74
2000 /	60.69	25.44	1.74	25.91	1.41	4.22	1.97

CASE NUMBER-- 31 - 0% INFLATION
 GENERATION TYPE-- OIL COMBINED CYCLE
 LOCATION-- NORTH POLE
 FUEL SOURCE-- TAPS
 PLANT FINANCING-- REA/MUNIC.
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- N.A.
 INSTALLED CAPACITY (MW)= 100.00
 CAPITAL COSTS(\$/KW)(1977\$)= 380.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 2700.
 OPERATING AND MAINTNANCE COSTS(\$/KW)(1977\$)= 9.40
 FINANCING DISCOUNT RATE(FRACTION)= 0.04180
 FACILITY CONSTRUCTION TIME(YEARS)= 2.
 PAYBACK PERIOD (YEARS)= 30.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.40,0.60,0.60,0.60,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 2.25, 2.25, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47,
 GENERAL INFLATION RATE(FRACTION)= 0.0000
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0250
 FUEL ESCALATION RATE(FRACTION)= 0.0300

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	0% FUEL	INSUR.	TAXES	INTERM REP.	
1980 /	40.56	5.22	1.99	32.16	0.22	0.66	0.31
1985 /	47.02	5.90	1.99	37.77	0.25	0.75	0.35
1990 /	53.99	6.68	1.99	43.79	0.28	0.85	0.40
1995 /	62.04	7.55	1.99	50.76	0.32	0.96	0.45
2000 /	71.34	8.55	1.99	58.85	0.36	1.08	0.51

CASE NUMBER-- 32 - 0% INFLATION
 GENERATION TYPE-- OIL COMBINED CYCLE
 LOCATION-- NORTH POLE
 FUEL SOURCE-- TAPS
 PLANT FINANCING-- APA
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- N.A.
 INSTALLED CAPACITY (MW)= 100.00
 CAPITAL COSTS(\$/KW)(1977\$)= 380.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 8700.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 9.40
 FINANCING DISCOUNT RATE(FRACTION)= 0.02800
 FACILITY CONSTRUCTION TIME(YEARS)= 2.
 PAYBACK PERIOD (YEARS)= 30.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.40,0.60,0.60,0.60,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 2.25, 2.25, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47,
 GENERAL INFLATION RATE(FRACTION)= 0.0000
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0250
 FUEL FSCALATION RATE(FRACTION)= 0.0300

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	0%M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	39.66	4.33	1.99	32.16	0.22	0.65	0.30
1985 /	46.00	4.90	1.99	37.77	0.25	0.74	0.34
1990 /	52.83	5.54	1.99	43.79	0.28	0.84	0.39
1995 /	60.73	6.27	1.99	50.76	0.32	0.95	0.44
2000 /	69.87	7.09	1.99	58.85	0.36	1.07	0.50

CASE NUMBER-- 33 - 0% INFLATION
 GENERATION TYPE-- GAS COMBINED CYCLE
 LOCATION-- NORTH POLE
 FUEL SOURCE-- ALCAN
 PLANT FINANCING-- REA/MUNIC.
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- N.A.
 INSTALLED CAPACITY (MW)= 100.00
 CAPITAL COSTS(\$/KW)(1977\$)= 380.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 9000.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 9.40
 FINANCING DISCOUNT RATE(FRACTION)= 0.04180
 FACILITY CONSTRUCTION TIME(YEARS)= 2.
 PAYBACK PERIOD (YEARS)= 30.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.40,0.60,0.60,0.60,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 2.00, 2.00, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47.
 GENERAL INFLATION RATE(FRACTION)= 0.0000
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0250
 FUEL ESCALATION RATE(FRACTION)= 0.0300

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS RAP	INTEREST % AMORIT	O%M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	41.16	5.22	1.99	32.76	0.22	0.65	0.31
1985 /	48.32	5.90	1.99	39.08	0.25	0.75	0.35
1990 /	55.50	6.68	1.99	45.30	0.28	0.85	0.40
1995 /	63.79	7.55	1.99	52.52	0.32	0.96	0.45
2000 /	73.37	8.55	1.99	60.88	0.36	1.08	0.51

CASE NUMBER-- 34 - 0% INFLATION
 GENERATION TYPE-- GAS COMBINED CYCLE
 LOCATION-- NORTH POLE
 FUEL SOURCE-- ALCAN
 PLANT FINANCING-- APA
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- N.A.
 INSTALLED CAPACITY (MW)= 100.00
 CAPITAL COSTS(\$/KW)(1977\$)= 380.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 9000.
 OPERATING AND MAINTAINANCE COSTS(\$/KW)(1977\$)= 9.40
 FINANCING DISCOUNT RATE(FRACTION)= 0.02800
 FACILITY CONSTRUCTION TIME(YEARS)= 2.
 PAYBACK PERIOD (YEARS)= 30.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.40,0.60,0.60,0.60,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 2.00, 2.00, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47,
 GENERAL INFLATION RATE(FRACTION)= 0.0000
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0250
 FUEL ESCALATION RATE(FRACTION)= 0.0300

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORT	O&M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	40.26	4.33	1.99	32.76	0.22	0.65	0.30
1985 /	47.30	4.90	1.99	39.08	0.25	0.74	0.34
1990 /	54.34	5.54	1.99	45.30	0.28	0.84	0.39
1995 /	62.48	6.27	1.99	52.52	0.32	0.95	0.44
2000 /	71.89	7.09	1.99	60.88	0.36	1.07	0.50

CASE NUMBER-- 40 - 0% INFLATION
 GENERATION TYPE-- HYDRO
 LOCATION-- BRADLEY LAKE
 FUEL SOURCE-- N.A.
 PLANT FINANCING-- APA
 FUEL SUPPLY FINANCING-- N.A.
 FGD-- N.A.
 INSTALLED CAPACITY (MW)= 70.00
 CAPITAL COSTS(\$/KW)(1977\$)= 2286.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 3500.
 OPERATING AND MAINTNANCE COSTS(\$/KW)(1977\$)= 9.28
 FINANCING DISCOUNT RATE(FRACTION)= 0.02800
 FACILITY CONSTRUCTION TIME(YEARS)= 5.
 PAYBACK PERIOD (YEARS)= 50.
 INSURANCE RATE (FRACTION)= 0.00100
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00000
 PLANT UTILIZATION FACTOR (FRACTION)
 0.52,0.52,0.52,0.52,0.52,0.52,0.52,0.52,0.52,0.52,0.52,0.52,
 UNIT FUEL COST (\$/MMBTU)
 0.00, 0.00, 0.00, 0.00, 0.00, 0.00, 0.00, 0.00, 0.00, 0.00, 0.00, 0.00,
 GENERAL INFLATION RATE(FRACTION)= 0.0000
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0250
 FUEL ESCALATION RATE(FRACTION)= 0.0300

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	U%M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	27.03	20.36	2.04	0.00	0.54	4.08	0.00
1985 /	30.31	23.04	2.04	0.00	0.62	4.62	0.00
1990 /	34.03	26.06	2.04	0.00	0.70	5.23	0.00
1995 /	38.23	29.49	2.04	0.00	0.79	5.91	0.00
2000 /	42.96	33.37	2.04	0.00	0.89	6.69	0.00

CASE NUMBER-- 41 - 0% INFLATION
 GENERATION TYPE-- HYDRO
 LOCATION-- CHAKACHAMNA
 FUEL SOURCE-- N.A.
 PLANT FINANCING-- APA
 FUEL SUPPLY FINANCING-- N.A.
 FGD-- N.A.
 INSTALLED CAPACITY (MW)= 366.00
 CAPITAL COSTS(\$/KW)(1977\$)= 2196.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 3500.
 OPERATING AND MAINTNANCE COSTS(\$/KW)(1977\$)= 5.12
 FINANCING DISCOUNT RATE(FRACTION)= 0.02800
 FACILITY CONSTRUCTION TIME(YEARS)= 5.
 PAYBACK PERIOD (YEARS)= 50.
 INSURANCE RATE (FRACTION)= 0.00100
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00000
 PLANT UTILIZATION FACTOR (FRACTION)
 0.50,0.50,0.50,0.50,0.50,0.50,0.50,0.50,0.50,0.50,0.50,
 UNIT FUEL COST (\$/MMBTU)
 0.00, 0.00, 0.00, 0.00, 0.00, 0.00, 0.00, 0.00, 0.00, 0.00, 0.00,
 GENERAL INFLATION RATE(FRACTION)= 0.0000
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0250
 FUEL ESCALATION RATE(FRACTION)= 0.0300

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	0%M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	26.13	20.34	1.17	0.00	0.54	4.08	0.00
1985 /	29.42	23.02	1.17	0.00	0.62	4.62	0.00
1990 /	33.13	26.04	1.17	0.00	0.70	5.22	0.00
1995 /	37.33	29.46	1.17	0.00	0.79	5.91	0.00
2000 /	42.08	33.33	1.17	0.00	0.89	6.68	0.00

CASE NUMBER-- 42 - 0% INFLATION
 GENERATION TYPE-- HYDRO
 LOCATION-- WATANA ONLY
 FUEL SOURCE-- N.A.
 PLANT FINANCING-- APA
 FUEL SUPPLY FINANCING-- N.A.
 FGD-- N.A.
 INSTALLED CAPACITY (MW)= 686.00
 CAPITAL COSTS(\$/KW)(1977\$)= 1921.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 3500.
 OPEATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 1.63
 FINANCING DISCOUNT RATE(FRACTION)= 0.02800
 FACILITY CONSTRUCTION TIME(YEARS)= 6.
 PAYBACK PERIOD (YEARS)= 50.
 INSURANCE RATE (FRACTION)= 0.00100
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00000
 PLANT UTILIZATION FACTOR (FRACTION)
 0.58,0.58,0.58,0.58,0.58,0.58,0.58,0.58,0.58,0.58,0.58,0.58,
 UNIT FUEL COST (\$/MMBTU)
 0.00, 0.00, 0.00, 0.00, 0.00, 0.00, 0.00, 0.00, 0.00, 0.00, 0.00, 0.00,
 GENERAL INFLATION RATE(FRACTION)= 0.0000
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0250
 FUEL ESCALATION RATE(FRACTION)= 0.0300

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS PAR	INTEREST % AMORIT	0% FUEL	INSUR.	TAXES	INTERM REP.	
1980 /	19.18	15.36	0.32	0.00	0.41	3.08	0.00
1985 /	21.65	17.38	0.32	0.00	0.46	3.49	0.00
1990 /	24.46	19.67	0.32	0.00	0.53	3.94	0.00
1995 /	27.63	22.25	0.32	0.00	0.59	4.46	0.00
2000 /	31.22	25.17	0.32	0.00	0.67	5.05	0.00

CASE NUMBER-- 43 - 0% INFLATION
 GENERATION TYPE-- HYDRO
 LOCATION-- WATANA + DEVIL CANYON
 FUEL SOURCE-- N.A.
 PLANT FINANCING-- APA
 FUEL SUPPLY FINANCING-- N.A.
 FGD-- N.A.
 INSTALLED CAPACITY (MW)= 1568.00
 CAPITAL COSTS(\$/KW)(1977\$)= 1275.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 3500.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 1.79
 FINANCING DISCOUNT RATE(FRACTION)= 0.02800
 FACILITY CONSTRUCTION TIME(YEARS)= 12.
 PAYBACK PERIOD (YEARS)= 50.
 INSURANCE RATE (FRACTION)= 0.00100
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00000
 PLANT UTILIZATION FACTOR (FRACTION)
 0.50,0.50,0.50,0.50,0.50,0.50,0.50,0.50,0.50,0.50,0.50,0.50,
 UNIT FUEL COST (\$/MMBTU)
 0.00, 0.00, 0.00, 0.00, 0.00, 0.00, 0.00, 0.00, 0.00, 0.00, 0.00, 0.00,
 GENERAL INFLATION RATE(FRACTION)= 0.0000
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0250
 FUEL ESCALATION RATE(FRACTION)= 0.0300

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	0%M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	15.05	11.93	0.41	0.00	0.32	2.39	0.00
1985 /	16.98	13.50	0.41	0.00	0.36	2.71	0.00
1990 /	19.15	15.27	0.41	0.00	0.41	3.06	0.00
1995 /	21.62	17.28	0.41	0.00	0.46	3.47	0.00
2000 /	24.41	19.55	0.41	0.00	0.52	3.92	0.00

4% INFLATION

CASE NUMBER-- 3 - 4% INFLATION
 GENERATION TYPE-- COAL STEAM TURBINE
 LOCATION-- RELUGA
 FUEL SOURCE-- BELUGA
 PLANT FINANCING-- APA
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- YES
 INSTALLED CAPACITY (MW)= 200.00
 CAPITAL COSTS(\$/KW)(1977\$)= 1400.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 10500.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 13.20
 FINANCING DISCOUNT RATE(FRACTION)= 0.06800
 FACILITY CONSTRUCTION TIME(YEARS)= 5.
 PAYBACK PERIOD (YEARS)= 35.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.20,0.75,0.75,0.75,0.75,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 1.00, 1.00, 1.00, 1.00, 1.00, 1.00, 1.00, 1.00, 1.00, 1.00, 1.00,
 GENERAL INFLATION RATE(FRACTION)= 0.0400
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0650
 FUEL ESCALATION RATE(FRACTION)= 0.0700

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	O%M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	71.35	27.72	4.99	33.69	0.92	2.75	1.28
1985 /	98.08	37.98	6.07	47.25	1.26	3.77	1.76
1990 /	134.98	52.03	7.39	66.27	1.72	5.16	2.41
1995 /	185.95	71.28	8.99	92.94	2.36	7.08	3.30
2000 /	256.41	97.67	10.94	130.35	3.23	9.69	4.52

CASE NUMBER-- 4 - 4% INFLATION
 GENERATION TYPE-- COAL STEAM TURBINE
 LOCATION-- BELUGA
 FUEL SOURCE-- BELUGA
 PLANT FINANCING-- APA
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- NO
 INSTALLED CAPACITY (MW)= 200.00
 CAPITAL COSTS(\$/KW)(1977\$)= 1220.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 10000.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 10.10
 FINANCING DISCOUNT RATE(FRACTION)= 0.06800
 FACILITY CONSTRUCTION TIME(YEARS)= 5.
 PAYBACK PERIOD (YEARS)= 35.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.20,0.75,0.75,0.75,0.75,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 1.00, 1.00, 1.00, 1.00, 1.00, 1.00, 1.00, 1.00, 1.00, 1.00,
 GENERAL INFLATION RATE(FRACTION)= 0.0400
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0650
 FUEL ESCALATION RATE(FRACTION)= 0.0700

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	0%M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	64.37	24.15	3.82	32.08	0.80	2.40	1.12
1985 /	88.65	33.09	4.65	45.00	1.09	3.28	1.53
1990 /	122.20	45.34	5.65	63.11	1.50	4.50	2.10
1995 /	168.61	62.12	6.88	88.51	2.06	6.17	2.88
2000 /	232.83	85.11	8.37	124.15	2.82	8.45	3.94

CASE NUMBER-- 7 - 4% INFLATION
 GENERATION TYPE-- COAL STEAM TURBINE
 LOCATION-- BELUGA
 FUEL SOURCE-- BELUGA
 PLANT FINANCING-- REA
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- YES
 INSTALLED CAPACITY (MW)= 200.00
 CAPITAL COSTS(\$/KW)(1977\$)= 1400.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 10500.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 13.20
 FINANCING DISCOUNT RATE(FRACTION)= 0.08500
 FACILITY CONSTRUCTION TIME(YEARS)= 5.
 PAYBACK PERIOD (YEARS)= 35.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.20,0.75,0.75,0.75,0.75,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 1.00, 1.00, 1.00, 1.00, 1.00, 1.00, 1.00, 1.00, 1.00, 1.00, 1.00,
 GENERAL INFLATION RATE(FRACTION)= 0.0400
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0650
 FUEL ESCALATION RATE(FRACTION)= 0.0700

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	O%M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	78.26	34.42	4.99	33.69	0.95	2.86	1.34
1985 /	107.54	47.17	6.07	47.25	1.31	3.92	1.83
1990 /	147.95	64.62	7.39	66.27	1.79	5.37	2.51
1995 /	203.72	88.54	8.99	92.94	2.45	7.36	3.44
2000 /	280.75	121.30	10.94	130.35	3.36	10.09	4.71

CASE NUMBER-- 8 - 4% INFLATION
 GENERATION TYPE-- COAL STEAM TURBINE
 LOCATION-- BELUGA
 FUEL SOURCE-- BELUGA
 PLANT FINANCING-- REA
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- NO
 INSTALLED CAPACITY (MW)= 200.00
 CAPITAL COSTS(\$/KW)(1977\$)= 1220.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 10000.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 10.10
 FINANCING DISCOUNT RATE(FRACTION)= 0.08500
 FACILITY CONSTRUCTION TIME(YEARS)= 5.
 PAYBACK PERIOD (YEARS)= 35.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.20,0.75,0.75,0.75,0.75,0.50,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 1.00, 1.00, 1.00, 1.00, 1.00, 1.00, 1.00, 1.00, 1.00, 1.00,
 GENERAL INFLATION RATE(FRACTION)= 0.0400
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0650
 FUEL ESCALATION RATE(FRACTION)= 0.0700

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	O%M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	70.39	30.00	3.82	32.08	0.83	2.49	1.16
1985 /	96.90	41.10	4.65	45.00	1.14	3.42	1.60
1990 /	133.50	56.31	5.65	63.11	1.56	4.68	2.19
1995 /	184.09	77.15	6.88	88.51	2.14	6.42	2.99
2000 /	254.04	105.71	8.37	124.15	2.93	8.79	4.10

CASE NUMBER-- 11 - 4% INFLATION
 GENERATION TYPE-- COAL STEAM TURBINE
 LOCATION-- ANCHORAGE
 FUEL SOURCE-- HEALY
 PLANT FINANCING-- APA
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- YES
 INSTALLED CAPACITY (MW)= 200.00
 CAPITAL COSTS(\$/KW)(1977\$)= 1280.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.L
 HEAT RATE (BTU/KWH)= 10500.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 10.50
 FINANCING DISCOUNT RATE(FRACTION)= 0.06800
 FACILITY CONSTRUCTION TIME(YEARS)= 5.
 PAYBACK PERIOD (YEARS)= 35.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.20,0.75,0.75,0.75,0.75,0.50,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10,
 GENERAL INFLATION RATE(FRACTION)= 0.0400
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0650
 FUEL ESCALATION RATE(FRACTION)= 0.0700L

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS PAR	INTEREST % AMORIT	O%M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	70.59	25.34	3.97	37.05	0.84	2.52	1.17
1985 /	97.73	34.72	4.63	51.97	1.15	3.45	1.61
1990 /	130.84	47.57	5.68	72.89	1.57	4.72	2.20
1995 /	186.20	65.17	7.15	102.23	2.16	6.47	3.02
2000 /	257.34	89.29	8.70	143.39	2.95	8.86	4.14

CASE NUMBER-- 12 - 4% INFLATION
 GENERATION TYPE-- COAL STEAM TURBINE
 LOCATION-- ANCHORAGE
 FUEL SOURCE-- HEALY
 PLANT FINANCING-- APA
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- NO
 INSTALLED CAPACITY (MW)= 200.00
 CAPITAL COSTS(\$/KW)(1977\$)= 1120.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 10000.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 8.10
 FINANCING DISCOUNT RATE(FRACTION)= 0.06800
 FACILITY CONSTRUCTION TIME(YEARS)= 5.
 PAYBACK PERIOD (YEARS)= 35.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.20,0.75,0.75,0.75,0.75,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10,
 GENERAL INFLATION RATE(FRACTION)= 0.0400
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0650
 FUEL ESCALATION RATE(FRACTION)= 0.0700

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	OXM	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	64.49	22.17	3.06	35.29	0.73	2.20	1.03
1985 /	89.03	30.38	3.73	49.50	1.01	3.02	1.41
1990 /	123.02	41.62	4.53	69.42	1.38	4.13	1.93
1995 /	170.10	57.03	5.52	97.37	1.89	5.66	2.64
2000 /	235.37	78.13	6.71	136.56	2.59	7.76	3.62

CASE NUMBER-- 13 - 4% INFLATION
 GENERATION TYPE-- COAL STEAM TURBINE
 LOCATION-- ANCHORAGE
 FUEL SOURCE-- HEALY
 PLANT FINANCING-- REA
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- YES
 INSTALLED CAPACITY (MW)= 200.00
 CAPITAL COSTS(\$/KW)(1977\$)= 1280.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 10500.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 10.50
 FINANCING DISCOUNT RATE(FRACTION)= 0.08500
 FACILITY CONSTRUCTION TIME(YEARS)= 5.
 PAYBACK PERIOD (YEARS)= 35.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.20,0.75,0.75,0.75,0.75,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10,
 GENERAL INFLATION RATE(FRACTION)= 0.0400
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0650
 FUEL ESCALATION RATE(FRACTION)= 0.0700

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	0% M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	77.21	31.47	3.97	37.05	0.87	2.62	1.22
1985 /	106.38	43.12	4.83	51.97	1.20	3.59	1.67
1990 /	146.69	59.08	5.68	72.89	1.64	4.91	2.29
1995 /	202.45	80.95	7.15	102.23	2.24	6.73	3.14
2000 /	279.59	110.90	8.70	143.39	3.07	9.22	4.30

CASE NUMBER-- 14 - 4% INFLATION
 GENERATION TYPE-- COAL STEAM TURBINE
 LOCATION-- ANCHORAGE
 FUEL SOURCE-- HEALY
 PLANT FINANCING-- REA
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- NO
 INSTALLED CAPACITY (MW)= 200.00
 CAPITAL COSTS(\$/KW)(1977\$)= 1120.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 10000.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 8.10
 FINANCING DISCOUNT RATE(FRACTION)= 0.08500
 FACILITY CONSTRUCTION TIME(YEARS)= 5.
 PAYBACK PERIOD (YEARS)= 35.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.20,0.75,0.75,0.75,0.75,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10,
 GENERAL INFLATION RATE(FRACTION)= 0.0400
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0650
 FUEL ESCALATION RATE(FRACTION)= 0.0700

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	O&M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	70.02	27.54	3.06	35.29	0.76	2.29	1.07
1985 /	96.60	37.73	3.73	49.50	1.05	3.14	1.46
1990 /	133.39	51.70	4.53	69.42	1.43	4.30	2.01
1995 /	184.31	70.83	5.52	97.37	1.96	5.89	2.75
2000 /	254.84	97.04	6.71	136.56	2.69	8.07	3.77

CASE NUMBER-- 15 - 4% INFLATION
 GENERATION TYPE-- COAL STEAM TURBINE
 LOCATION-- ANCHORAGE
 FUEL SOURCE-- HEALY
 PLANT FINANCING-- MUNIC.
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- YES
 INSTALLED CAPACITY (MW)= 200.00
 CAPITAL COSTS(\$/KW)(1977\$)= 1280.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 10500.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 10.50
 FINANCING DISCOUNT RATE(FRACTION)= 0.07100
 FACILITY CONSTRUCTION TIME(YEARS)= 5.
 PAYBACK PERIOD (YEARS)= 35.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.20,0.75,0.75,0.75,0.75,0.60,0.50,0.40.
 UNIT FUEL COST (\$/MMBTU)
 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10,
 GENERAL INFLATION RATE(FRACTION)= 0.0400
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0350
 FUEL ESCALATION RATE(FRACTION)= 0.0700

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	O&M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	71.96	26.37	3.97	37.05	0.84	2.53	1.18
1985 /	99.18	36.13	4.83	51.97	1.16	3.47	1.62
1990 /	136.83	49.50	5.88	72.89	1.59	4.76	2.22
1995 /	188.94	67.82	7.15	102.23	2.17	6.52	3.04
2000 /	261.08	92.93	8.70	143.39	2.98	8.93	4.17

CASE NUMBER-- 16 - 4% INFLATION
 GENERATION TYPE-- COAL STEAM TURBINE
 LOCATION-- ANCHORAGE
 FUEL SOURCE-- HEALY
 PLANT FINANCING-- MUNTC.
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- NO
 INSTALLED CAPACITY (MW)= 200.00
 CAPITAL COSTS(\$/KW)(1977\$)= 1120.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 10000.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 8.10
 FINANCING DISCOUNT RATE(FRACTION)= 0.07100
 FACILITY CONSTRUCTION TIME(YEARS)= 5.
 PAYBACK PERIOD (YEARS)= 35.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.20,0.75,0.75,0.75,0.75,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10,
 GENERAL INFLATION RATE(FRACTION)= 0.0400
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0650
 FUEL ESCALATION RATE(FRACTION)= 0.0700

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	OXM	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	65.42	23.08	3.06	35.29	0.74	2.22	1.03
1985 /	90.30	31.62	3.73	49.50	1.01	3.04	1.42
1990 /	120.76	43.32	4.53	69.42	1.39	4.16	1.94
1995 /	172.49	59.35	5.52	97.37	1.90	5.70	2.66
2000 /	238.64	81.31	6.71	136.56	2.60	7.81	3.64

CASE NUMBER-- 17 - 4% INFLATION
 GENERATION TYPE-- COAL STEAM TURBINE
 LOCATION-- ANCHORAGE
 FUEL SOURCE-- HEALY
 PLANT FINANCING-- APA
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- YES
 INSTALLED CAPACITY (MW)= 400.00
 CAPITAL COSTS(\$/KW)(1977\$)= 1150.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 10500.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 11.40
 FINANCING DISCOUNT RATE(FRACTION)= 0.05800
 FACILITY CONSTRUCTION TIME(YEARS)= 5.
 PAYBACK PERIOD (YEARS)= 35.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.20,0.75,0.75,0.75,0.75,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10,
 GENERAL INFLATION RATE(FRACTION)= 0.0400
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0650
 FUEL ESCALATION RATE(FRACTION)= 0.0700

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	O&M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	68.20	22.77	4.31	37.05	0.75	2.26	1.05
1985 /	93.98	31.19	5.24	51.97	1.03	3.10	1.45
1990 /	120.65	42.74	6.38	72.89	1.41	4.24	1.98
1995 /	179.02	58.56	7.76	102.23	1.94	5.81	2.71
2000 /	247.40	80.23	9.45	143.39	2.65	7.96	3.72

CASE NUMBER-- 18 - 4% INFLATION
 GENERATION TYPE-- COAL STEAM TURBINE
 LOCATION-- ANCHORAGE
 FUEL SOURCE-- HEALY
 PLANT FINANCING-- APA
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- YES
 INSTALLED CAPACITY (MW)= 100.00
 CAPITAL COSTS(\$/KW)(1977\$)= 1688.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 10500.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 12.80
 FINANCING DISCOUNT RATE(FRACTION)= 0.06800
 FACILITY CONSTRUCTION TIME(YEARS)= 4.
 PAYBACK PERIOD (YEARS)= 35.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.20,0.75,0.75,0.75,0.75,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10,
 GENERAL INFLATION RATE(FRACTION)= 0.0400
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0650
 FUEL ESCALATION RATE(FRACTION)= 0.0700

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL RUS BAR	INTEREST % AMORIT	O%M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	81.23	33.37	4.84	37.05	1.10	3.31	1.55
1985 /	111.75	45.72	5.89	51.97	1.51	4.54	2.12
1990 /	153.89	62.64	7.16	72.89	2.07	6.22	2.90
1995 /	212.12	85.83	8.72	102.23	2.84	8.52	3.98
2000 /	292.60	117.59	10.61	143.39	3.89	11.67	5.45

CASE NUMBER-- 19 - 4% INFLATION
 GENERATION TYPE-- GAS COMBINED CYCLE
 LOCATION-- COOK INLET
 FUEL SOURCE-- COOK INLET
 PLANT FINANCING-- APA
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- N.A.
 INSTALLED CAPACITY (MW)= 100.00
 CAPITAL COSTS(\$/KW)(1977\$)= 300.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 9000.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 9.40
 FINANCING DISCOUNT RATE(FRACTION)= 0.06800
 FACILITY CONSTRUCTION TIME(YEARS)= 2.
 PAYBACK PERIOD (YEARS)= 30.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.40,0.60,0.60,0.60,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 2.00, 2.00, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47,
 GENERAL INFLATION RATE(FRACTION)= 0.0400
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0650
 FUEL ESCALATION RATE(FRACTION)= 0.0700

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	D%M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	72.71	6.09	3.49	62.09	0.19	0.58	0.27
1985 /	102.66	8.34	4.24	88.65	0.26	0.79	0.37
1990 /	142.89	11.43	5.16	124.34	0.36	1.09	0.51
1995 /	190.01	15.66	6.28	174.40	0.50	1.49	0.69
2000 /	277.36	21.46	7.64	244.60	0.68	2.04	0.95

CASE NUMBER-- 20 - 4% INFLATION
 GENERATION TYPE-- GAS COMBINED CYCLE
 LOCATION-- COOK INLET
 FUEL SOURCE-- COOK INLET
 PLANT FINANCING-- REA
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- N.A.
 INSTALLED CAPACITY (MW)= 100.00
 CAPITAL COSTS(\$/KW)(1977\$)= 300.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 9000.
 OPERATING AND MAINTNANCE COSTS(\$/KW)(1977\$)= 9.40
 FINANCING DISCOUNT RATE(FRACTION)= 0.08500
 FACILITY CONSTRUCTION TIME(YEARS)= 2.
 PAYBACK PERIOD (YEARS)= 30.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.40,0.60,0.60,0.60,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 2.00, 2.00, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47,
 GENERAL INFLATION RATE(FRACTION)= 0.0400
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0650
 FUEL ESCALATION RATE(FRACTION)= 0.0700

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	O&M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	73.93	7.29	3.49	62.09	0.20	0.59	0.27
1985 /	104.33	9.39	4.24	88.55	0.27	0.81	0.38
1990 /	145.17	13.68	5.16	124.34	0.37	1.10	0.51
1995 /	202.14	18.75	6.28	174.40	0.50	1.51	0.71
2000 /	281.65	25.69	7.64	244.50	0.69	2.07	0.97

CASE NUMBER-- 21 - 4% INFLATION
 GENERATION TYPE-- GAS COMBINED CYCLE
 LOCATION-- COOK INLET
 FUEL SOURCE-- COOK INLET
 PLANT FINANCING-- MUNIC.
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- N.A.
 INSTALLED CAPACITY (MW)= 100.00
 CAPITAL COSTS(\$/KW)(1977\$)= 300.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 9000.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 9.40
 FINANCING DISCOUNT RATE(FRACTION)= 0.07100
 FACILITY CONSTRUCTION TIME(YEARS)= 2.
 PAYBACK PERIOD (YEARS)= 30.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.40,0.60,0.60,0.60,0.50,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 2.00, 2.00, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47,
 GENERAL INFLATION RATE(FRACTION)= 0.0400
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0650
 FUEL ESCALATION RATE(FRACTION)= 0.0700

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	O%M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	72.02	6.29	3.49	62.09	0.19	0.58	0.27
1985 /	102.95	8.62	4.24	88.65	0.26	0.79	0.37
1990 /	143.28	11.82	5.16	124.34	0.36	1.09	0.51
1995 /	190.55	16.19	6.28	174.40	0.50	1.49	0.70
2000 /	278.10	22.18	7.64	244.60	0.68	2.04	0.95

CASE NUMBER-- 22 - 4% INFLATION
 GENERATION TYPE-- OIL COMBINED CYCLE
 LOCATION-- COOK INLET
 FUEL SOURCE-- COOK INLET
 PLANT FINANCING-- APA
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- N.A.
 INSTALLED CAPACITY (MW)= 100.00
 CAPITAL COSTS(\$/KW)(1977\$)= 300.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 8700.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 9.40
 FINANCING DISCOUNT RATE(FRACTION)= 0.06800
 FACILITY CONSTRUCTION TIME(YEARS)= 2.
 PAYBACK PERIOD (YEARS)= 30.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.40,0.60,0.60,0.50,0.50,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU).
 2.25, 2.25, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47,
 GENERAL INFLATION RATE(FRACTION)= 0.0400
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0650
 FUEL ESCALATION RATE(FRACTION)= 0.0700

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL RUS BAR	INTEREST % AMORIT	0% M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	71.21	6.09	3.49	60.60	0.19	0.58	0.27
1985 /	99.71	8.34	4.24	85.70	0.26	0.79	0.37
1990 /	138.74	11.43	5.16	120.20	0.36	1.09	0.51
1995 /	173.20	15.66	6.28	168.58	0.50	1.49	0.69
2000 /	269.21	21.46	7.64	236.45	0.68	2.04	0.95

CASE NUMBER-- 23 - 4% INFLATION
 GENERATION TYPE-- OIL COMBINED CYCLE
 LOCATION-- COOK INLET
 FUEL SOURCE-- COOK INLET
 PLANT FINANCING-- PEA
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- N.A.
 INSTALLED CAPACITY (MW)= 100.00
 CAPITAL COSTS(\$/KW)(1977\$)= 300.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 8700.
 OPERATING AND MAINTAINANCE COSTS(\$/KW)(1977\$)= 9.40
 FINANCING DISCOUNT RATE(FRACTION)= 0.08500
 FACILITY CONSTRUCTION TIME(YEARS)= 2.
 PAYBACK PERIOD (YEARS)= 30.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.40,0.60,0.60,0.60,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 2.25, 2.25, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47,
 GENERAL INFLATION RATE(FRACTION)= 0.0400
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0650
 FUEL ESCALATION RATE(FRACTION)= 0.0700

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	O&M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	72.43	7.29	3.49	60.60	0.20	0.59	0.27
1985 /	101.38	9.99	4.24	85.70	0.27	0.81	0.38
1990 /	141.03	13.68	5.16	120.20	0.37	1.10	0.51
1995 /	196.33	18.75	6.28	168.58	0.50	1.51	0.71
2000 /	273.50	25.69	7.64	236.45	0.69	2.07	0.97

CASE NUMBER-- 24 - 4% INFLATION
 GENERATION TYPE-- OIL COMBINED CYCLE
 LOCATION-- COOK INLET
 FUEL SOURCE-- COOK INLET
 PLANT FINANCING-- MUNIC.
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- N.A.
 INSTALLED CAPACITY (MW)= 100.00
 CAPITAL COSTS(\$/KW)(1977\$)= 300.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 8700.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 9.40
 FINANCING DISCOUNT RATE(FRACTION)= 0.07100
 FACILITY CONSTRUCTION TIME(YEARS)= 2.
 PAYBACK PERIOD (YEARS)= 30.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.40,0.60,0.60,0.60,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 2.25, 2.25, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47,
 GENERAL INFLATION RATE(FRACTION)= 0.0400
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0650
 FUEL ESCALATION RATE(FRACTION)= 0.0700

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL PUS BAR	INTEREST % AMORIT	0%M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	71.42	6.29	3.49	60.60	0.19	0.58	0.27
1985 /	99.99	8.62	4.24	85.70	0.26	0.79	0.37
1990 /	139.13	11.62	5.16	120.20	0.36	1.09	0.51
1995 /	193.73	16.19	6.28	168.58	0.50	1.49	0.70
2000 /	269.94	22.18	7.64	236.45	0.68	2.04	0.95

CASE NUMBER-- 25 - 4% INFLATION
 GENERATION TYPE-- COAL STEAM TURBINE
 LOCATION-- HEALY
 FUEL SOURCE-- HEALY
 PLANT FINANCING-- REA/MUNIC.
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- YES
 INSTALLED CAPACITY (MW)= 200.00
 CAPITAL COSTS(\$/KW)(1977\$)= 1710.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 10500.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 10.50
 FINANCING DISCOUNT RATE(FRACTION)= 0.08180
 FACILITY CONSTRUCTION TIME(YEARS)= 5.
 PAYBACK PERIOD (YEARS)= 35.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.20,0.75,0.75,0.75,0.75,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 0.70, 0.70, 0.70, 0.70, 0.70, 0.70, 0.70, 0.70, 0.70, 0.70,
 GENERAL INFLATION RATE(FRACTION)= 0.0400
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0650
 FUEL ESCALATION RATE(FRACTION)= 0.0700

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	O%M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	74.23	40.43	3.97	23.58	1.16	3.47	1.62
1985 /	101.86	55.40	4.83	33.07	1.59	4.76	2.22
1990 /	132.89	75.90	5.88	46.39	2.17	6.51	3.04
1995 /	192.26	103.99	7.15	65.06	2.98	8.93	4.17
2000 /	264.43	142.47	8.70	91.25	4.08	12.23	5.71

CASE NUMBER-- 26 - 4% INFLATION
 GENERATION TYPE-- COAL STEAM TURBINE
 LOCATION-- HEALY
 FUEL SOURCE-- HEALY
 PLANT FINANCING-- REA/MUNIC.
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- NO
 INSTALLED CAPACITY (MW)= 200.00
 CAPITAL COSTS(\$/KW)(1977\$)= 1470.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 10000.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 8.10
 FINANCING DISCOUNT RATE(FRACTION)= 0.08180
 FACILITY CONSTRUCTION TIME(YEARS)= 5.
 PAYBACK PERIOD (YEARS)= 35.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.20,0.75,0.75,0.75,0.75,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 0.70, 0.70, 0.70, 0.70, 0.70, 0.70, 0.70, 0.70, 0.70, 0.70, 0.70,
 GENERAL INFLATION RATE(FRACTION)= 0.0400
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0650
 FUEL ESCALATION RATE(FRACTION)= 0.0700

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	0%M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	65.65	34.76	3.06	22.46	0.99	2.98	1.39
1985 /	90.20	47.62	3.73	31.50	1.36	4.09	1.91
1990 /	124.04	65.25	4.53	44.18	1.87	5.60	2.61
1995 /	170.68	89.39	5.52	61.96	2.56	7.67	3.58
2000 /	235.01	122.48	6.71	86.90	3.50	10.51	4.91

CASE NUMBER-- 27 - 4% INFLATION
 GENERATION TYPE-- COAL STEAM TURBINE
 LOCATION-- NENANA
 FUEL SOURCE-- HEALY
 PLANT FINANCING-- REA/MUNIC.
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- YES
 INSTALLED CAPACITY (MW)= 200.00
 CAPITAL COSTS(\$/KW)(1977\$)= 1710.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 10500.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 10.50
 FINANCING DISCOUNT RATE(FRACTION)= 0.08180
 FACILITY CONSTRUCTION TIME(YEARS)= 5.
 PAYBACK PERIOD (YEARS)= 35.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.20,0.75,0.75,0.75,0.75,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 0.91, 0.91, 0.91, 0.91, 0.91, 0.91, 0.91, 0.91, 0.91, 0.91,
 GENERAL INFLATION RATE(FRACTION)= 0.0400
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0650
 FUEL ESCALATION RATE(FRACTION)= 0.0700

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	OXM	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	81.31	40.43	3.97	30.65	1.16	3.47	1.62
1985 /	111.78	55.40	4.83	42.99	1.59	4.76	2.22
1990 /	153.80	75.90	5.88	60.30	2.17	6.51	3.04
1995 /	211.78	103.99	7.15	84.58	2.98	8.93	4.17
2000 /	291.81	142.47	8.70	118.62	4.08	12.23	5.71

CASE NUMBER-- 28 - 4% INFLATION
 GENERATION TYPE-- COAL STEAM TURBINE
 LOCATION-- NENANA
 FUEL SOURCE-- HEALY
 PLANT FINANCING-- REA/MUNIC.
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- NO
 INSTALLED CAPACITY (MW)= 200.00
 CAPITAL COSTS(\$/KW)(1977\$)= 1470.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 10000.
 OPERATING AND MAINTNANCE COSTS(\$/KW)(1977\$)= 8.10
 FINANCING DISCOUNT RATE(FRACTION)= 0.08180
 FACILITY CONSTRUCTION TIME(YEARS)= 5.
 PAYBACK PERIOD (YEARS)= 35.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.20,0.75,0.75,0.75,0.75,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 0.91, 0.91, 0.91, 0.91, 0.91, 0.91, 0.91, 0.91, 0.91, 0.91,
 GENERAL INFLATION RATE(FRACTION)= 0.0400
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0650
 FUEL ESCALATION RATE(FRACTION)= 0.0700

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	O%M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	72.39	34.76	3.06	29.19	0.99	2.98	1.39
1985 /	99.65	47.62	3.73	40.95	1.36	4.09	1.91
1990 /	137.29	65.25	4.53	57.43	1.87	5.60	2.61
1995 /	189.27	89.39	5.52	80.55	2.56	7.67	3.58
2000 /	261.08	122.48	6.71	112.97	3.50	10.51	4.91

CASE NUMBER-- 29 - 4% INFLATION
 GENERATION TYPE-- COAL STEAM TURBINE
 LOCATION-- NENANA
 FUEL SOURCE-- HEALY
 PLANT FINANCING-- APA
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- YES
 INSTALLED CAPACITY (MW)= 200.00
 CAPITAL COSTS(\$/KW)(1977\$)= 1710.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 10500.
 OPERATING AND MAINTNANCE COSTS(\$/KW)(1977\$)= 10.50
 FINANCING DISCOUNT RATE(FRACTION)= 0.06800
 FACILITY CONSTRUCTION TIME(YEARS)= 5.
 PAYBACK PERIOD (YEARS)= 35.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.20,0.75,0.75,0.75,0.75,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 0.91, 0.91, 0.91, 0.91, 0.91, 0.91, 0.91, 0.91, 0.91, 0.91,
 GENERAL INFLATION RATE(FRACTION)= 0.0400
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0650
 FUEL ESCALATION RATE(FRACTION)= 0.0700

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	O&M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	74.53	33.85	3.97	30.65	1.12	3.36	1.57
1985 /	102.50	46.38	4.83	42.99	1.53	4.60	2.15
1990 /	141.08	63.55	5.88	60.30	2.10	6.31	2.94
1995 /	194.35	87.07	7.15	84.58	2.88	8.64	4.03
2000 /	267.93	119.29	8.70	118.62	3.95	11.84	5.53

CASE NUMBER-- 30 - 4% INFLATION
 GENERATION TYPE-- COAL STEAM TURBINE
 LOCATION-- NENANA
 FUEL SOURCE-- HEALY
 PLANT FINANCING-- APA
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- NO
 INSTALLED CAPACITY (MW)= 200.00
 CAPITAL COSTS(\$/KW)(1977\$)= 1470.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 10000.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 8.10
 FINANCING DISCOUNT RATE(FRACTION)= 0.06800
 FACILITY CONSTRUCTION TIME(YEARS)= 5.
 PAYBACK PERIOD (YEARS)= 35.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.20,0.75,0.75,0.75,0.75,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 0.91, 0.91, 0.91, 0.91, 0.91, 0.91, 0.91, 0.91, 0.91, 0.91,
 GENERAL INFLATION RATE(FRACTION)= 0.0400
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0650
 FUEL ESCALATION RATE(FRACTION)= 0.0700

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS\$ BAR	INTEREST X AMORIT	OXM	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	66.56	29.10	3.06	29.19	0.96	2.89	1.35
1985 /	91.67	39.87	3.73	40.95	1.32	3.96	1.85
1990 /	126.36	54.63	4.53	57.43	1.81	5.42	2.53
1995 /	174.29	74.85	5.52	80.55	2.48	7.43	3.47
2000 /	240.56	102.55	6.71	112.97	3.39	10.18	4.75

CASE NUMBER-- 31 - 4% INFLATION
 GENERATION TYPE-- OIL COMBINED CYCLE
 LOCATION-- NORTH POLE
 FUEL SOURCE-- TAPS
 PLANT FINANCING-- REA/MUNIC.
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- N.A.
 INSTALLED CAPACITY (MW)= 100.00
 CAPITAL COSTS(\$/KW)(1977\$)= 380.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 8700.
 OPERATING AND MAINTNANCE COSTS(\$/KW)(1977\$)= 9.40
 FINANCING DISCOUNT RATE(FRACTION)= 0.08180
 FACILITY CONSTRUCTION TIME(YEARS)= 2.
 PAYBACK PERIOD (YEARS)= 30.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.40,0.50,0.60,0.60,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 2.25, 2.25, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47,
 GENERAL INFLATION RATE(FRACTION)= 0.0400
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0650
 FUEL ESCALATION RATE(FRACTION)= 0.0700

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE	TOTAL BUS BAR	INTEREST % AMORIT	DXM	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	70.36	8.94	3.49	60.60	0.25	0.74	0.35
1985 /	104.02	12.25	4.24	85.70	0.34	1.02	0.47
1990 /	144.64	16.78	5.16	120.20	0.46	1.39	0.65
1995 /	201.28	22.99	6.28	168.58	0.64	1.91	0.89
2000 /	260.29	31.50	7.64	236.45	0.87	2.61	1.22

CASE NUMBER-- 32 - 4% INFLATION
 GENERATION TYPE-- OIL COMBINED CYCLE
 LOCATION-- NORTH POLE
 FUEL SOURCE-- TAPS
 PLANT FINANCING-- APA
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- N.A.
 INSTALLED CAPACITY (MW)= 100.00
 CAPITAL COSTS(\$/KW)(1977\$)= 380.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 8700.
 OPERATING AND MAINTNANCE COSTS(\$/KW)(1977\$)= 9.40
 FINANCING DISCOUNT RATE(FRACTION)= 0.06800
 FACILITY CONSTRUCTION TIME(YEARS)= 2.
 PAYBACK PERIOD (YEARS)= 30.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.40,0.60,0.60,0.60,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 2.25, 2.25, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47,
 GENERAL INFLATION RATE(FRACTION)= 0.0400
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0650
 FUEL ESCALATION RATE(FRACTION)= 0.0700

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE	TOTAL / BUS BAR	INTEREST / % AMORIT	D%M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	73.12	7.71	3.49	60.60	0.24	0.73	0.34
1985 /	102.32	10.57	4.24	85.70	0.33	1.00	0.47
1990 /	142.31	14.48	5.16	120.20	0.46	1.38	0.64
1995 /	198.09	19.84	6.28	168.58	0.63	1.88	0.88
2000 /	275.91	27.18	7.64	236.45	0.86	2.58	1.20

CASE NUMBER-- 33 - 4% INFLATION
 GENERATION TYPE-- GAS COMBINED CYCLE
 LOCATION-- NORTH POLE
 FUEL SOURCE-- ALCAN
 PLANT FINANCING-- REA/MUNIC.
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- N.A.
 INSTALLED CAPACITY (MW)= 100.00
 CAPITAL COSTS(\$/KW)(1977\$)= 380.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 9000.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 9.40
 FINANCING DISCOUNT RATE(FRACTION)= 0.08180
 FACILITY CONSTRUCTION TIME(YEARS)= 2.
 PAYBACK PERIOD (YEARS)= 30.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.40,0.60,0.60,0.60,0.60,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 2.00, 2.00, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47,
 GENERAL INFLATION RATE(FRACTION)= 0.0400
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0650
 FUEL ESCALATION RATE(FRACTION)= 0.0700

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	0%M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	75.85	8.94	3.49	62.09	0.25	0.74	0.35
1985 /	106.97	12.25	4.24	88.65	0.34	1.02	0.47
1990 /	148.79	16.78	5.16	124.34	0.46	1.39	0.65
1995 /	207.10	22.99	6.28	174.40	0.64	1.91	0.89
2000 /	288.44	31.50	7.64	244.60	0.87	2.61	1.22

CASE NUMBER-- 34 - 4% INFLATION
 GENERATION TYPE-- GAS COMBINED CYCLE
 LOCATION-- NORTH POLE
 FUEL SOURCE-- ALCAN
 PLANT FINANCING-- APA
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- N.A.
 INSTALLED CAPACITY (MW)= 100.00
 CAPITAL COSTS(\$/KW)(1977\$)= 380.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 9000.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 9.40
 FINANCING DISCOUNT RATE(FRACTION)= 0.06800
 FACILITY CONSTRUCTION TIME(YEARS)= 2.
 PAYBACK PERIOD (YEARS)= 30.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.40,0.60,0.60,0.60,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 2.00, 2.00, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47,
 GENERAL INFLATION RATE(FRACTION)= 0.0400
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0650
 FUEL ESCALATION RATE(FRACTION)= 0.0700

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	OXM	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	74.61	7.71	3.49	62.09	0.24	0.73	0.34
1985 /	105.27	10.57	4.24	88.65	0.33	1.00	0.47
1990 /	146.46	14.48	5.16	124.34	0.46	1.38	0.64
1995 /	203.90	19.64	6.28	174.40	0.63	1.88	0.88
2000 /	264.06	27.18	7.64	244.60	0.86	2.58	1.20

CASE NUMBER-- 40 - 4% INFLATION

GENERATION TYPE-- HYDRO

LOCATION-- BRADLEY LAKE

FUEL SOURCE-- N.A.

PLANT FINANCING-- APA

FUEL SUPPLY FINANCING-- N.A.

FGD-- N.A.

INSTALLED CAPACITY (MW)= 70.00

CAPITAL COSTS(\$/KW)(1977\$)= 2286.00

FIRST POWER ON LINE DATE(YEAR)= 1980.

HEAT RATE (BTU/KWH)= 3500.

OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 9.28

FINANCING DISCOUNT RATE(FRACTION)= 0.06800

FACILITY CONSTRUCTION TIME(YEARS)= 5.

PAYBACK PERIOD (YEARS)= 50.

INSURANCE RATE (FRACTION)= 0.00100

TAX RATE (FRACTION)= 0.00750

INTERIM REPLACEMENT RATE(FRACTION)= 0.00000

PLANT UTILIZATION FACTOR (FRACTION)

0.52,0.52,0.52,0.52,0.52,0.52,0.52,0.52,0.52,0.52,0.52,

UNIT FUEL COST (\$/MMBTU)

0.00, 0.00, 0.00, 0.00, 0.00, 0.00, 0.00, 0.00, 0.00, 0.00, 0.00,

GENERAL INFLATION RATE(FRACTION)= 0.0400

CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0650

FUEL ESCALATION RATE(FRACTION)= 0.0700

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL RUS BAR	INTEREST % AMORIT	OXM	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	52.66	43.12	4.35	0.00	0.61	4.58	0.00
1985 /	71.49	59.08	5.30	0.00	0.84	6.27	0.00
1990 /	97.13	80.94	6.44	0.00	1.15	8.59	0.00
1995 /	132.08	110.90	7.84	0.00	1.57	11.78	0.00
2000 /	170.76	151.94	9.54	0.00	2.15	16.13	0.00

CASE NUMBER-- 41 - 4% INFLATION
 GENERATION TYPE-- HYDRO
 LOCATION-- CHAKACHAMNA
 FUEL SOURCE-- N.A.
 PLANT FINANCING-- APA
 FUEL SUPPLY FINANCING-- N.A.
 FGD-- N.A.
 INSTALLED CAPACITY (MW)= 366.00
 CAPITAL COSTS(\$/KW)(1977\$)= 2196.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 3500.
 OPERATING AND MAINTNANCE COSTS(\$/KW)(1977\$)= 5.12
 FINANCING DISCOUNT RATE(FRACTION)= 0.06800
 FACILITY CONSTRUCTION TIME(YEARS)= 5.
 PAYBACK PERIOD (YEARS)= 50.
 INSURANCE RATE (FRACTION)= 0.00100
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00000
 PLANT UTILIZATION FACTOR (FRACTION)
 0.50,0.50,0.50,0.50,0.50,0.50,0.50,0.50,0.50,0.50,0.50,0.50,
 UNIT FUEL COST (\$/MMBTU)
 0.00, 0.00, 0.00, 0.00, 0.00, 0.00, 0.00, 0.00, 0.00, 0.00, 0.00,
 GENERAL INFLATION RATE(FRACTION)= 0.0400
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0650
 FUEL ESCALATION RATE(FRACTION)= 0.0700

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	OXM	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	50.76	43.08	2.50	0.00	0.61	4.57	0.00
1985 /	69.16	59.02	3.04	0.00	0.84	6.27	0.00
1990 /	94.30	80.87	3.70	0.00	1.14	8.59	0.00
1995 /	128.63	110.79	4.50	0.00	1.57	11.76	0.00
2000 /	175.54	151.80	5.47	0.00	2.15	16.12	0.00

CASE NUMBER-- 42 - 4% INFLATION

GENERATION TYPE-- HYDRO

LOCATION-- WATANA ONLY

FUEL SOURCE-- N.A.

PLANT FINANCING-- APA

FUEL SUPPLY FINANCING-- N.A.

FGD-- N.A.

INSTALLED CAPACITY (MW)= 686.00

CAPITAL COSTS(\$/KW)(1977\$)= 1921.00

FIRST POWER ON LINE DATE(YEAR)= 1980.

HEAT RATE (BTU/KWH)= 3500.

OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 1.63

FINANCING DISCOUNT RATE(FRACTION)= 0.06800

FACILITY CONSTRUCTION TIME(YEARS)= 6.

PAYBACK PERIOD (YEARS)= 50.

INSURANCE RATE (FRACTION)= 0.00100

TAX RATE (FRACTION)= 0.00750

INTERIM REPLACEMENT RATE(FRACTION)= 0.00000

PLANT UTILIZATION FACTOR (FRACTION)

0.58,0.58,0.58,0.58,0.58,0.58,0.58,0.58,0.58,0.58,0.58,0.58,

UNIT FUEL COST (\$/MMBTU)

0.00, 0.00, 0.00, 0.00, 0.00, 0.00, 0.00, 0.00, 0.00, 0.00, 0.00, 0.00,

GENERAL INFLATION RATE(FRACTION)= 0.0400

CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0650

FUEL ESCALATION RATE(FRACTION)= 0.0700

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	0% M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	37.13	32.53	0.69	0.00	0.46	3.45	0.00
1985 /	50.77	44.57	0.83	0.00	0.63	4.73	0.00
1990 /	60.43	61.07	1.01	0.00	0.86	6.46	0.00
1995 /	94.07	83.67	1.23	0.00	1.18	8.58	0.00
2000 /	120.93	114.63	1.50	0.00	1.62	12.17	0.00

CASE NUMBER-- 43 - 4% INFLATION
 GENERATION TYPE-- HYDRO
 LOCATION-- WATANA + DEVIL CANYON
 FUEL SOURCE-- N.A.
 PLANT FINANCING-- APA
 FUEL SUPPLY FINANCING-- N.A.
 FGD-- N.A.
 INSTALLED CAPACITY (MW)= 1568.00
 CAPITAL COSTS(\$/KW)(1977\$)= 1275.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 3500.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 1.79
 FINANCING DISCOUNT RATE(FRACTION)= 0.06800
 FACILITY CONSTRUCTION TIME(YEARS)= 12.
 PAYBACK PERIOD (YEARS)= 50.
 INSURANCE RATE (FRACTION)= 0.00100
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00000
 PLANT UTILIZATION FACTOR (FRACTION)
 0.50,0.50,0.50,0.50,0.50,0.50,0.50,0.50,0.50,0.50,0.50,
 UNIT FUEL COST (\$/MMBTU)
 0.00, 0.00, 0.00, 0.00, 0.00, 0.00, 0.00, 0.00, 0.00, 0.00, 0.00,
 GENERAL INFLATION RATE(FRACTION)= 0.0400
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0650
 FUEL ESCALATION RATE(FRACTION)= 0.0700

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	OXM	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	29.17	25.26	0.87	0.00	0.36	2.68	0.00
1985 /	39.84	34.61	1.06	0.00	0.49	3.67	0.00
1990 /	50.42	47.42	1.29	0.00	0.67	5.03	0.00
1995 /	74.36	64.96	1.57	0.00	0.92	6.90	0.00
2000 /	101.63	89.01	1.91	0.00	1.26	9.45	0.00

7% INFLATION

CASE NUMBER-- 3 - 7% INFLATION
 GENERATION TYPE-- COAL STEAM TURBINE
 LOCATION-- BELUGA
 FUEL SOURCE-- BELUGA
 PLANT FINANCING-- APA
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- YES
 INSTALLED CAPACITY (MW)= 200.00
 CAPITAL COSTS(\$/KW)(1977\$)= 1400.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 10500.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 13.20
 FINANCING DISCOUNT RATE(FRACTION)= 0.09800
 FACILITY CONSTRUCTION TIME(YEARS)= 5.
 PAYBACK PERIOD (YEARS)= 35.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.20,0.75,0.75,0.75,0.75,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 1.00, 1.00, 1.00, 1.00, 1.00, 1.00, 1.00, 1.00, 1.00, 1.00, 1.00,
 GENERAL INFLATION RATE(FRACTION)= 0.0700
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0950
 FUEL ESCALATION RATE(FRACTION)= 0.1000

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	0%M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	116.25	40.61	8.43	61.83	1.00	2.99	1.40
1985 /	183.80	63.93	11.83	99.57	1.57	4.71	2.20
1990 /	290.93	100.64	16.59	160.36	2.47	7.41	3.46
1995 /	460.96	158.42	23.27	258.27	3.89	11.66	5.44
2000 /	731.03	249.40	32.64	415.94	6.12	18.36	8.57

CASE NUMBER-- 4 - 7% INFLATION
 GENERATION TYPE-- COAL STEAM TURBINE
 LOCATION-- BELUGA
 FUEL SOURCE-- BELUGA
 PLANT FINANCING-- APA
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- NO
 INSTALLED CAPACITY (MW)= 200.00
 CAPITAL COSTS(\$/KW)(1977\$)= 1220.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 10000.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 10.10
 FINANCING DISCOUNT RATE(FRACTION)= 0.09800
 FACILITY CONSTRUCTION TIME(YEARS)= 5.
 PAYBACK PERIOD (YEARS)= 35.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.20,0.75,0.75,0.75,0.75,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 1.00, 1.00, 1.00, 1.00, 1.00, 1.00, 1.00, 1.00, 1.00, 1.00,
 GENERAL INFLATION RATE(FRACTION)= 0.0700
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0950
 FUEL ESCALATION RATE(FRACTION)= 0.1000

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	0% M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	105.41	35.39	6.45	58.88	0.87	2.61	1.22
1985 /	166.97	55.71	9.05	94.83	1.37	4.10	1.91
1990 /	264.74	87.70	12.70	152.73	2.15	6.46	3.01
1995 /	420.13	138.06	17.81	245.97	3.39	10.16	4.74
2000 /	667.24	217.33	24.97	396.13	5.33	16.00	7.47

CASE NUMBER-- 7 - 7% INFLATION
 GENERATION TYPE-- COAL STEAM TURBINE
 LOCATION-- BELUGA
 FUEL SOURCE-- BELUGA
 PLANT FINANCING-- REA
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- YES
 INSTALLED CAPACITY (MW)= 200.00
 CAPITAL COSTS(\$/KW)(1977\$)= 1400.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 10500.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 13.20
 FINANCING DISCOUNT RATE(FRACTION)= 0.11500
 FACILITY CONSTRUCTION TIME(YEARS)= 5.
 PAYBACK PERIOD (YEARS)= 35.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.20,0.75,0.75,0.75,0.75,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 1.00, 1.00, 1.00, 1.00, 1.00, 1.00, 1.00, 1.00, 1.00, 1.00,
 GENERAL INFLATION RATE(FRACTION)= 0.0700
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0950
 FUEL ESCALATION RATE(FRACTION)= 0.1000

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	O%M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	124.58	48.73	8.43	61.83	1.04	3.11	1.45
1985 /	196.92	76.71	11.83	99.57	1.63	4.89	2.28
1990 /	311.58	120.76	16.59	160.36	2.57	7.70	3.59
1995 /	493.47	190.11	23.27	258.27	4.04	12.12	5.66
2000 /	782.20	299.27	32.64	415.94	6.36	19.09	8.91

CASE NUMBER-- 8 - 7% INFLATION
 GENERATION TYPE-- COAL STEAM TURBINE
 LOCATION-- BELUGA
 FUEL SOURCE-- BELUGA
 PLANT FINANCING-- REA
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- NO
 INSTALLED CAPACITY (MW)= 200.00
 CAPITAL COSTS(\$/KW)(1977\$)= 1220.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 10000.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 10.10
 FINANCING DISCOUNT RATE(FRACTION)= 0.11500
 FACILITY CONSTRUCTION TIME(YEARS)= 5.
 PAYBACK PERIOD (YEARS)= 35.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.20,0.75,0.75,0.75,0.75,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 1.00, 1.00, 1.00, 1.00, 1.00, 1.00, 1.00, 1.00, 1.00, 1.00, 1.00,
 GENERAL INFLATION RATE(FRACTION)= 0.0700
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0950
 FUEL ESCALATION RATE(FRACTION)= 0.1000

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	0%M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	112.67	42.46	6.45	58.88	0.90	2.71	1.26
1985 /	178.40	66.85	9.05	94.83	1.42	4.26	1.99
1990 /	282.74	105.23	12.70	152.73	2.24	6.71	3.13
1995 /	448.45	165.66	17.81	245.97	3.52	10.56	4.93
2000 /	711.84	260.79	24.97	396.13	5.54	16.63	7.76

CASE NUMBER-- 11 - 7% INFLATION
 GENERATION TYPE-- COAL STEAM TURBINE
 LOCATION-- ANCHORAGE
 FUEL SOURCE-- HEALY
 PLANT FINANCING-- APA
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- YES
 INSTALLED CAPACITY (MW)= 200.00
 CAPITAL COSTS(\$/KW)(1977\$)= 1280.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 10500.
 OPERATING AND MAINTAINANCE COSTS(\$/KW)(1977\$)= 10.50
 FINANCING DISCOUNT RATE(FRACTION)= 0.09800
 FACILITY CONSTRUCTION TIME(YEARS)= 5.
 PAYBACK PERIOD (YEARS)= 35.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.20,0.75,0.75,0.75,0.75,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10,
 GENERAL INFLATION RATE(FRACTION)= 0.0700
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0950
 FUEL ESCALATION RATE(FRACTION)= 0.1000

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL RUS PAR	INTEREST % AMORIT	0%M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	116.77	37.13	6.71	68.01	0.91	2.73	1.28
1985 /	185.13	58.45	9.41	109.53	1.43	4.30	2.01
1990 /	293.80	92.01	13.20	176.40	2.26	6.77	3.16
1995 /	466.65	144.85	18.51	284.09	3.55	10.66	4.98
2000 /	741.74	228.02	25.96	457.54	5.60	16.79	7.83

CASE NUMBER-- 12 - 7% INFLATION
 GENERATION TYPE-- COAL STEAM TURBINE
 LOCATION-- ANCHORAGE
 FUEL SOURCE-- HEALY
 PLANT FINANCING-- APA
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- NO
 INSTALLED CAPACITY (MW)= 200.00
 CAPITAL COSTS(\$/KW)(1977\$)= 1120.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 10000.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 8.10
 FINANCING DISCOUNT RATE(FRACTION)= 0.09800
 FACILITY CONSTRUCTION TIME(YEARS)= 5.
 PAYBACK PERIOD (YEARS)= 35.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.20,0.75,0.75,0.75,0.75,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10,
 GENERAL INFLATION RATE(FRACTION)= 0.0700
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0950
 FUEL ESCALATION RATE(FRACTION)= 0.1000

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMOINT	O%M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	106.74	32.49	5.18	64.77	0.80	2.39	1.12
1985 /	169.49	51.14	7.26	104.31	1.26	3.77	1.76
1990 /	269.36	80.51	10.18	168.00	1.98	5.93	2.77
1995 /	428.38	126.74	14.28	270.57	3.11	9.33	4.35
2000 /	681.74	199.52	20.03	435.75	4.90	14.69	6.86

CASE NUMBER-- 13 - 7% INFLATION
 GENERATION TYPE-- COAL STEAM TURBINE
 LOCATION-- ANCHORAGE
 FUEL SOURCE-- HEALY
 PLANT FINANCING-- REA
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- YES
 INSTALLED CAPACITY (MW)= 200.00
 CAPITAL COSTS(\$/KW)(1977\$)= 1280.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 10500.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 10.50
 FINANCING DISCOUNT RATE(FRACTION)= 0.11500
 FACILITY CONSTRUCTION TIME(YEARS)= 5.
 PAYBACK PERIOD (YEARS)= 35.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.20,0.75,0.75,0.75,0.75,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10,
 GENERAL INFLATION RATE(FRACTION)= 0.0700
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0950
 FUEL ESCALATION RATE(FRACTION)= 0.1000

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	0%M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	124.38	44.55	6.71	68.01	0.95	2.84	1.33
1985 /	197.13	70.14	9.41	109.53	1.49	4.47	2.09
1990 /	312.68	110.41	13.20	176.40	2.35	7.04	3.29
1995 /	496.37	173.51	18.51	284.09	3.60	11.08	5.17
2000 /	788.53	273.62	25.96	457.54	5.82	17.45	8.14

CASE NUMBER-- 14 - 7% INFLATION
 GENERATION TYPE-- COAL STEAM TURBINE
 LOCATION-- ANCHORAGE
 FUEL SOURCE-- HEALY
 PLANT FINANCING-- REA
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- NO
 INSTALLED CAPACITY (MW)= 200.00
 CAPITAL COSTS(\$/KW)(1977\$)= 1120.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 10000.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 8.10
 FINANCING DISCOUNT RATE(FRACTION)= 0.11500
 FACILITY CONSTRUCTION TIME(YEARS)= 5.
 PAYBACK PERIOD (YEARS)= 35.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.20,0.75,0.75,0.75,0.75,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10,
 GENERAL INFLATION RATE(FRACTION)= 0.0700
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0950
 FUEL ESCALATION RATE(FRACTION)= 0.1000

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	0%M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	113.40	38.98	5.18	64.77	0.83	2.49	1.16
1965 /	179.99	61.37	7.26	104.31	1.30	3.91	1.83
1990 /	285.88	96.61	10.18	168.00	2.05	6.16	2.88
1995 /	454.39	152.08	14.28	270.57	3.23	9.70	4.53
2000 /	722.65	239.42	20.03	435.75	5.09	15.27	7.13

CASE NUMBER-- 15 - 7% INFLATION
 GENERATION TYPE-- COAL STEAM TURBINE
 LOCATION-- ANCHORAGE
 FUEL SOURCE-- HEALY
 PLANT FINANCING-- MUNIC.
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- YES
 INSTALLED CAPACITY (MW)= 200.00
 CAPITAL COSTS(\$/KW)(1977\$)= 1280.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 10500.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 10.50
 FINANCING DISCOUNT RATE(FRACTION)= 0.10100
 FACILITY CONSTRUCTION TIME(YEARS)= 5.
 PAYBACK PERIOD (YEARS)= 35.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.20,0.75,0.75,0.75,0.75,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10,
 GENERAL INFLATION RATE(FRACTION)= 0.0700
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0950
 FUEL ESCALATION RATE(FRACTION)= 0.1000

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	0%M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	118.00	38.39	6.71	68.01	0.92	2.75	1.28
1985 /	187.17	60.43	9.41	109.53	1.44	4.33	2.02
1990 /	297.01	95.14	13.20	176.40	2.27	6.82	3.18
1995 /	471.70	149.77	18.51	284.09	3.58	10.74	5.01
2000 /	749.69	235.77	25.96	457.54	5.63	16.90	7.89

CASE NUMBER-- 16 - 7% INFLATION
 GENERATION TYPE-- COAL STEAM TURBINE
 LOCATION-- ANCHORAGE
 FUEL SOURCE-- HEALY
 PLANT FINANCING-- MUNTC.
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- NO
 INSTALLED CAPACITY (MW)= 200.00
 CAPITAL COSTS(\$/KW)(1977\$)= 1120.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 10000.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 8.10
 FINANCING DISCOUNT RATE(FRACTION)= 0.10100
 FACILITY CONSTRUCTION TIME(YEARS)= 5.
 PAYBACK PERIOD (YEARS)= 35.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.20,0.75,0.75,0.75,0.75,0.60,0.50,0.40,
 UNIT FUEL COST. (\$/MMBTU)
 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10,
 GENERAL INFLATION RATE(FRACTION)= 0.0700
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0950
 FUEL ESCALATION RATE(FRACTION)= 0.1000

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON LINE DATE	TOTAL BUS BAR	INTEREST % AMORIT	O&M	FUEL	INSUR.	TAXES	INTERM REP.
1980	107.87	33.59	5.18	64.77	0.80	2.41	1.12
1985	171.28	52.88	7.26	104.31	1.26	3.79	1.77
1990	272.17	83.24	10.18	168.00	1.99	5.97	2.79
1995	432.80	131.04	14.28	270.57	3.13	9.40	4.38
2000	688.70	206.30	20.03	435.75	4.93	14.79	6.90

CASE NUMBER-- 17 - 7% INFLATION
 GENERATION TYPE-- COAL STEAM TURBINE
 LOCATION-- ANCHORAGE
 FUEL SOURCE-- HEALY
 PLANT FINANCING-- APA
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- YES
 INSTALLED CAPACITY (MW)= 400.00
 CAPITAL COSTS(\$/KW)(1977\$)= 1150.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 10500.
 OPERATING AND MAINTAINANCE COSTS(\$/KW)(1977\$)= 11.40
 FINANCING DISCOUNT RATE(FRACTION)= 0.09800
 FACILITY CONSTRUCTION TIME(YEARS)= 5.
 PAYBACK PERIOD (YEARS)= 35.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.20,0.75,0.75,0.75,0.75,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10,
 GENERAL INFLATION RATE(FRACTION)= 0.0700
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0950
 FUEL ESCALATION RATE(FRACTION)= 0.1000

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	O&M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	113.07	33.36	7.28	68.01	0.82	2.46	1.15
1985 /	170.22	52.51	10.22	109.53	1.29	3.87	1.80
1990 /	264.35	82.06	14.33	176.40	2.03	6.09	2.84
1995 /	451.57	130.13	20.10	284.09	3.19	9.58	4.47
2000 /	717.74	204.86	28.19	457.54	5.03	15.08	7.04

CASE NUMBER-- 18 - 7% INFLATION
 GENERATION TYPE-- COAL STEAM TURBINE
 LOCATION-- ANCHORAGE
 FUEL SOURCE-- HEALY
 PLANT FINANCING-- APA
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- YES
 INSTALLED CAPACITY (MW)= 100.00
 CAPITAL COSTS(\$/KW)(1977\$)= 1688.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 10500.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 12.80
 FINANCING DISCOUNT RATE(FRACTION)= 0.09800
 FACILITY CONSTRUCTION TIME(YEARS)= 4.
 PAYBACK PERIOD (YEAPS)= 35.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.20,0.75,0.75,0.75,0.75,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10, 1.10,
 GENERAL INFLATION RATE(FRACTION)= 0.0700
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0950
 FUEL ESCALATION RATE(FRACTION)= 0.1000

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	OXM	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	131.56	48.89	8.18	68.01	1.20	3.60	1.68
1985 /	208.17	76.97	11.47	109.53	1.89	5.67	2.64
1990 /	329.72	121.17	16.09	176.40	2.97	8.92	4.16
1995 /	522.69	190.75	22.57	284.09	4.68	14.04	6.55
2000 /	820.27	300.29	31.05	457.54	7.37	22.11	10.32

CASE NUMBER-- 19 - 7% INFLATION
 GENERATION TYPE-- GAS COMBINED CYCLE
 LOCATION-- COOK INLET
 FUEL SOURCE-- COOK INLET
 PLANT FINANCING-- APA
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- N.A.
 INSTALLED CAPACITY (MW)= 100.00
 CAPITAL COSTS(\$/KW)(1977\$)= 300.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 9000.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 9.40
 FINANCING DISCOUNT RATE(FRACTION)= 0.09800
 FACILITY CONSTRUCTION TIME(YEARS)= 2.
 PAYBACK PERIOD (YEARS)= 30.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.40,0.60,0.60,0.60,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 2.00, 2.00, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47,
 GENERAL INFLATION RATE(FRACTION)= 0.0700
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0950
 FUEL ESCALATION RATE(FRACTION)= 0.1000

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	O&M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	120.99	8.74	5.64	105.47	0.21	0.63	0.29
1985 /	195.35	13.76	7.91	171.89	0.33	0.99	0.46
1990 /	312.40	21.67	11.10	276.33	0.52	1.56	0.73
1995 /	499.93	34.11	15.57	445.84	0.82	2.45	1.14
2000 /	800.51	53.69	21.84	718.03	1.29	3.86	1.80

CASE NUMBER-- 20 - 7% INFLATION
 GENERATION TYPE-- GAS COMBINED CYCLE
 LOCATION-- COOK INLET
 FUEL SOURCE-- COOK INLET
 PLANT FINANCING-- REA
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- N.A.
 INSTALLED CAPACITY (MW)= 100.00
 CAPITAL COSTS(\$/KW)(1977\$)= 300.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 9000.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 9.40
 FINANCING DISCOUNT RATE(FRACTION)= 0.11500
 FACILITY CONSTRUCTION TIME(YEARS)= 2.
 PAYBACK PERIOD (YEARS)= 30.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.40,0.60,0.60,0.60,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 2.00, 2.00, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47,
 GENERAL INFLATION RATE(FRACTION)= 0.0700
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0950
 FUEL ESCALATION RATE(FRACTION)= 0.1000

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL RUS BAR	INTEREST % AMORIT	O&M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	122.44	10.18	5.64	105.47	0.21	0.64	0.30
1985 /	197.63	15.02	7.91	171.89	0.33	1.00	0.47
1990 /	316.00	25.22	11.10	276.83	0.53	1.58	0.74
1995 /	505.59	39.70	15.57	445.84	0.83	2.49	1.16
2000 /	809.42	62.50	21.84	718.03	1.31	3.92	1.83

CASE NUMBER-- 21 - 7% INFLATION
 GENERATION TYPE-- GAS COMBINED CYCLE
 LOCATION-- COOK INLET
 FUEL SOURCE-- COOK INLET
 PLANT FINANCING-- MUNIC.
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- N.A.
 INSTALLED CAPACITY (MW)= 100.00
 CAPITAL COSTS(\$/KW)(1977\$)= 300.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 9000.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 9.40
 FINANCING DISCOUNT RATE(FRACTION)= 0.10100
 FACILITY CONSTRUCTION TIME(YEARS)= 2.
 PAYBACK PERIOD (YEARS)= 30.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.40,0.60,0.60,0.60,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 2.00, 2.00, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47,
 GENERAL INFLATION RATE(FRACTION)= 0.0700
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0950
 FUEL ESCALATION RATE(FRACTION)= 0.1000

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	O&M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	121.24	8.99	5.64	105.47	0.21	0.63	0.29
1985 /	195.74	14.15	7.91	171.89	0.33	0.99	0.46
1990 /	313.02	22.28	11.10	276.33	0.52	1.56	0.73
1995 /	500.90	35.07	15.57	445.84	0.82	2.46	1.15
2000 /	802.04	55.21	21.84	718.03	1.29	3.87	1.81

CASE NUMBER-- 22 - 7% INFLATION
 GENERATION TYPE-- OIL COMBINED CYCLE
 LOCATION-- COOK INLET
 FUEL SOURCE-- COOK INLET
 PLANT FINANCING-- APA
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- N.A.
 INSTALLED CAPACITY (MW)= 100.00
 CAPITAL COSTS(\$/KW)(1977\$)= 300.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 8700.
 OPERATING AND MAINTAINANCE COSTS(\$/KW)(1977\$)= 9.40
 FINANCING DISCOUNT RATE(FRACTION)= 0.09500
 FACILITY CONSTRUCTION TIME(YEARS)= 2.
 PAYBACK PERIOD (YEARS)= 30.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.40,0.60,0.60,0.60,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 2.25, 2.25, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47,
 GENERAL INFLATION RATE(FRACTION)= 0.0700
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0950
 FUEL ESCALATION RATE(FRACTION)= 0.1000

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE	TOTAL BUS BAR	INTEREST % AMORIT	O&M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	118.12	8.74	5.64	102.60	0.21	0.63	0.29
1985 /	189.62	13.76	7.91	166.16	0.33	0.99	0.46
1990 /	303.17	21.67	11.10	267.60	0.52	1.56	0.73
1995 /	485.07	34.11	15.57	430.98	0.82	2.45	1.14
2000 /	776.57	53.69	21.54	694.09	1.29	3.86	1.80

CASE NUMBER-- 23 - 7% INFLATION
 GENERATION TYPE-- OIL COMBINED CYCLE
 LOCATION-- COOK INLET
 FUEL SOURCE-- COOK INLET
 PLANT FINANCING-- REA
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- N.A.
 INSTALLED CAPACITY (MW)= 100.00
 CAPITAL COSTS(\$/KW)(1977\$)= 300.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 8700.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 9.40
 FINANCING DISCOUNT RATE(FRACTION)= 0.11500
 FACILITY CONSTRUCTION TIME(YEARS)= 2.
 PAYBACK PERIOD (YEARS)= 30.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.40,0.60,0.60,0.60,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 2.25, 2.25, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47,
 GENERAL INFLATION RATE(FRACTION)= 0.0700
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0950
 FUEL ESCALATION RATE(FRACTION)= 0.1000

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	0%M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	119.57	10.18	5.64	102.50	0.21	0.64	0.30
1985 /	191.90	16.02	7.91	166.16	0.33	1.00	0.47
1990 /	306.77	25.22	11.10	267.60	0.53	1.58	0.74
1995 /	490.73	39.70	15.57	430.98	0.83	2.49	1.16
2000 /	785.48	62.50	21.84	694.09	1.31	3.92	1.63

CASE NUMBER-- 24 - 7% INFLATION
 GENERATION TYPE-- OIL COMBINED CYCLE
 LOCATION-- COOK INLET
 FUEL SOURCE-- COOK INLET
 PLANT FINANCING-- MUNIC.
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- N.A.
 INSTALLED CAPACITY (MW)= 100.00
 CAPITAL COSTS(\$/KW)(1977\$)= 300.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 8700.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 9.40
 FINANCING DISCOUNT RATE(FRACTION)= 0.10100
 FACILITY CONSTRUCTION TIME(YEARS)= 2.
 PAYBACK PERIOD (YEARS)= 30.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.40,0.60,0.60,0.60,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 2.25, 2.25, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47,
 GENERAL INFLATION RATE(FRACTION)= 0.0700
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0950
 FUEL ESCALATION RATE(FRACTION)= 0.1000

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS PAR	INTEREST % AMORIT	O%M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	118.37	8.99	5.64	102.60	0.21	0.63	0.29
1985 /	190.01	14.15	7.91	166.16	0.33	0.99	0.46
1990 /	303.79	22.28	11.10	267.60	0.52	1.56	0.73
1995 /	486.04	35.07	15.57	430.98	0.82	2.46	1.15
2000 /	778.11	55.21	21.84	694.09	1.29	3.87	1.81

CASE NUMBER-- 25 - 7% INFLATION
 GENERATION TYPE-- COAL STEAM TURBINE
 LOCATION-- HEALY
 FUEL SOURCE-- HEALY
 PLANT FINANCING-- REA/MUNIC.
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- YES
 INSTALLED CAPACITY (MW)= 200.00
 CAPITAL COSTS(\$/KW)(1977\$)= 1710.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 10500.
 OPERATING AND MAINTAINANCE COSTS(\$/KW)(1977\$)= 10.50
 FINANCING DISCOUNT RATE(FRACTION)= 0.11180
 FACILITY CONSTRUCTION TIME(YEARS)= 5.
 PAYBACK PERIOD (YEARS)= 35.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.20,0.75,0.75,0.75,0.75,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 0.70, 0.70, 0.70, 0.70, 0.70, 0.70, 0.70, 0.70, 0.70, 0.70,
 GENERAL INFLATION RATE(FRACTION)= 0.0700
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0950
 FUEL ESCALATION RATE(FRACTION)= 0.1000

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	0%M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	114.35	57.58	6.71	43.28	1.26	3.77	1.76
1985 /	180.44	90.65	9.41	69.70	1.98	5.93	2.77
1990 /	284.96	142.70	13.20	112.25	3.11	9.34	4.36
1995 /	450.41	224.65	18.51	180.79	4.90	14.70	6.86
2000 /	712.43	353.65	25.96	291.16	7.71	23.14	10.80

CASE NUMBER-- 26 - 7% INFLATION
 GENERATION TYPE-- COAL STEAM TURBINE
 LOCATION-- HEALY
 FUEL SOURCE-- HEALY
 PLANT FINANCING-- REA/MUNIC.
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- NO
 INSTALLED CAPACITY (MW)= 200.00
 CAPITAL COSTS(\$/KW)(1977\$)= 1470.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 10000.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 8.10
 FINANCING DISCOUNT RATE(FRACTION)= 0.11180
 FACILITY CONSTRUCTION TIME(YEARS)= 5.
 PAYBACK PERIOD (YEARS)= 35.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.20,0.75,0.75,0.75,0.75,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 0.70, 0.70, 0.70, 0.70, 0.70, 0.70, 0.70, 0.70, 0.70, 0.70, 0.70, 0.70,
 GENERAL INFLATION RATE(FRACTION)= 0.0700
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0950
 FUEL ESCALATION RATE(FRACTION)= 0.1000

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	O%M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	101.73	49.50	5.18	41.22	1.08	3.24	1.51
1985 /	160.75	77.93	7.26	66.38	1.70	5.10	2.38
1990 /	254.22	122.67	10.18	106.91	2.68	8.03	3.75
1995 /	402.32	193.12	14.28	172.18	4.21	12.64	5.90
2000 /	637.15	304.02	20.03	277.29	6.63	19.90	9.28

CASE NUMBER-- 27 - 7% INFLATION
 GENERATION TYPE-- COAL STEAM TURBINE
 LOCATION-- NENANA
 FUEL SOURCE-- HEALY
 PLANT FINANCING-- REA/MUNIC.
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- YES
 INSTALLED CAPACITY (MW)= 200.00
 CAPITAL COSTS(\$/KW)(1977\$)= 1710.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 10500.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 10.50
 FINANCING DISCOUNT RATE(FRACTION)= 0.11180
 FACILITY CONSTRUCTION TIME(YEARS)= 5.
 PAYBACK PERIOD (YEARS)= 35.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0,00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.20,0.75,0.75,0.75,0.75,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 0.91, 0.91, 0.91, 0.91, 0.91, 0.91, 0.91, 0.91, 0.91, 0.91,
 GENERAL INFLATION RATE(FRACTION)= 0.0700
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0950
 FUEL ESCALATION RATE(FRACTION)= 0.1000L

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	O%M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	127.34	57.58	6.71	56.26	1.26	3.77	1.76
1985 /	201.35	90.65	9.41	90.61	1.98	5.93	2.77
1990 /	318.64	142.70	13.20	145.93	3.11	9.34	4.36
1995 /	504.64	224.65	18.51	235.02	4.90	14.70	6.86
2000 /	799.78	353.65	25.96	378.51	7.71	23.14	10.80

CASE NUMBER-- 28 - 7% INFLATION
 GENERATION TYPE-- COAL STEAM TURBINE
 LOCATION-- NENANA
 FUEL SOURCE-- HEALY
 PLANT FINANCING-- REA/MUNIC.
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- NO
 INSTALLED CAPACITY (MW)= 200.00
 CAPITAL COSTS(\$/KW)(1977\$)= 1470.00L
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 10000.
 OPERATING AND MAINTAINANCE COSTS(\$/KW)(1977\$)= 8.10
 FINANCING DISCOUNT RATE(FRACTION)= 0.11180
 FACILITY CONSTRUCTION TIME(YEARS)= 5.
 PAYBACK PERIOD (YEARS)= 35.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.20,0.75,0.75,0.75,0.75,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 0.91, 0.91, 0.91, 0.91, 0.91, 0.91, 0.91, 0.91, 0.91, 0.91,
 GENERAL INFLATION RATE(FRACTION)= 0.0700
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0950
 FUEL ESCALATION RATE(FRACTION)= 0.1000

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	O%M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	114.09	49.50	5.18	53.58	1.08	3.24	1.51
1985 /	180.66	77.93	7.26	86.30	1.70	5.10	2.38
1990 /	286.29	122.67	10.18	138.98	2.68	8.03	3.75
1995 /	453.98	193.12	14.28	223.83	4.21	12.64	5.90
2000 /	720.34	304.02	20.03	360.48	6.63	19.90	9.28

CASE NUMBER-- 29 - 7% INFLATION
 GENERATION TYPE-- COAL STEAM TURBINE
 LOCATION-- NENANA
 FUEL SOURCE-- HEALY
 PLANT FINANCING-- APA
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- YES
 INSTALLED CAPACITY (MW)= 200.00
 CAPITAL COSTS(\$/KW)(1977\$)= 1710.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 10500.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 10.50
 FINANCING DISCOUNT RATE(FRACTION)= 0.09800
 FACILITY CONSTRUCTION TIME(YEARS)= 5.
 PAYBACK PERIOD (YEARS)= 35.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.20,0.75,0.75,0.75,0.75,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 0.91, 0.91, 0.91, 0.91, 0.91, 0.91, 0.91, 0.91, 0.91, 0.91, 0.91,
 GENERAL INFLATION RATE(FRACTION)= 0.0700
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0950
 FUEL ESCALATION RATE(FRACTION)= 0.1000

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON LINE DATE	TOTAL BUS BAR	INTEREST % AMORIT	O%M	FUEL	INSUR.	TAXES	INTERM REP.
1980	119.14	49.60	6.71	56.26	1.22	3.65	1.70
1985	188.45	78.08	9.41	90.61	1.92	5.75	2.68
1990	298.34	122.92	13.20	145.93	3.02	9.05	4.22
1995	472.68	193.50	18.51	235.02	4.75	14.25	6.65
2000	749.46	304.62	25.96	378.51	7.48	22.43	10.47

CASE NUMBER-- 30 - 7% INFLATION
 GENERATION TYPE-- COAL STEAM TURBINE
 LOCATION-- NENANA
 FUEL SOURCE-- HEALY
 PLANT FINANCING-- APA
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- NO
 INSTALLED CAPACITY (MW)= 200.00
 CAPITAL COSTS(\$/KW)(1977\$)= 1470.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 10000.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 8.10
 FINANCING DISCOUNT RATE(FRACTION)= 0.09800
 FACILITY CONSTRUCTION TIME(YEARS)= 5.
 PAYBACK PERIOD (YEARS)= 35.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.20,0.75,0.75,0.75,0.75,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 0.91, 0.91, 0.91, 0.91, 0.91, 0.91, 0.91, 0.91, 0.91, 0.91, 0.91,
 GENERAL INFLATION RATE(FRACTION)= 0.0700
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0950
 FUEL ESCALATION RATE(FRACTION)= 0.1000

LEVELIZED COST OF POWER (MILLS/KWH) L

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	0%M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	107.05	42.64	5.18	53.58	1.05	3.14	1.47
1985 /	169.57	67.12	7.26	86.30	1.65	4.94	2.31
1990 /	268.83	105.67	10.18	138.98	2.59	7.78	3.63
1995 /	426.50	166.35	14.28	223.83	4.08	12.25	5.72
2000 /	677.08	261.87	20.03	360.48	6.43	19.28	9.00

CASE NUMBER-- 31 - 7% INFLATION
 GENERATION TYPE-- OIL COMBINED CYCLE
 LOCATION-- NORTH POLE
 FUEL SOURCE-- TAPS
 PLANT FINANCING-- REA/MUNIC.
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- N.A.
 INSTALLED CAPACITY (MW)= 100.00
 CAPITAL COSTS(\$/KW)(1977\$)= 380.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 8700.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 9.40
 FINANCING DISCOUNT RATE(FRACTION)= 0.11180
 FACILITY CONSTRUCTION TIME(YEARS)= 2.
 PAYBACK PERIOD (YEARS)= 30.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.40,0.60,0.60,0.60,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 2.25, 2.25, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47,
 GENERAL INFLATION RATE(FRACTION)= 0.0700
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0950
 FUEL ESCALATION RATE(FRACTION)= 0.1000.

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL / BUS BAR	INTEREST / % AMORIT	0%M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	122.24	12.54	5.64	102.60	0.27	0.61	0.38
1985 /	196.10	19.74	7.91	166.16	0.42	1.27	0.59
1990 /	313.38	31.08	11.10	267.60	0.67	2.00	0.93
1995 /	501.13	48.92	15.57	430.98	1.05	3.15	1.47
2000 /	801.86	77.02	21.84	694.09	1.65	4.95	2.31

CASE NUMBER-- 32 - 7% INFLATION
 GENERATION TYPE-- OIL COMBINED CYCLE
 LOCATION-- NORTH POLE
 FUEL SOURCE-- TAPS
 PLANT FINANCING-- APA
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- N.A.
 INSTALLED CAPACITY (MW)= 100.00
 CAPITAL COSTS(\$/KW)(1977\$)= 380.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 8700.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 9.40
 FINANCING DISCOUNT RATE(FRACTION)= 0.09800
 FACILITY CONSTRUCTION TIME(YEARS)= 2.
 PAYBACK PERIOD (YEARS)= 30.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.40,0.60,0.60,0.60,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 2.25, 2.25, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47,
 GENERAL INFLATION RATE(FRACTION)= 0.0700
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0950
 FUEL ESCALATION RATE(FRACTION)= 0.1000

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON LINE DATE	TOTAL BUS BAR	INTEREST % AMORIT	0% M	FUEL	INSUR.	TAXES	INTERM REP.
1980	120.75	11.07	5.64	102.60	0.27	0.80	0.37 L
1985	193.76	17.43	7.91	166.16	0.42	1.25	0.58
1990	309.70	27.44	11.10	267.60	0.66	1.97	0.92
1995	495.34	43.20	15.57	430.98	1.04	3.11	1.45
2000	792.74	68.01	21.84	694.09	1.63	4.89	2.28

CASE NUMBER-- 33 - 7% INFLATION
 GENERATION TYPE-- GAS COMBINED CYCLE
 LOCATION-- NORTH POLE
 FUEL SOURCE-- ALCAN
 PLANT FINANCING-- REA/MUNIC.
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- N.A.
 INSTALLED CAPACITY (MW)= 100.00
 CAPITAL COSTS(\$/KW)(1977\$)= 380.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 9000.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 9.40
 FINANCING DISCOUNT RATE(FRACTION)= 0.11180
 FACILITY CONSTRUCTION TIME(YEARS)= 2.
 PAYBACK PERIOD (YEARS)= 30.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.40,0.60,0.60,0.60,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 2.00, 2.00, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47,
 GENERAL INFLATION RATE(FRACTION)= 0.0700
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0950
 FUEL ESCALATION RATE(FRACTION)= 0.1000

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	DISC %M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	125.11	12.54	5.64	105.47	0.27	0.81	0.38
1985 /	201.83	19.74	7.91	171.89	0.42	1.27	0.59
1990 /	322.60	31.08	11.10	276.83	0.67	2.00	0.93
1995 /	515.99	48.92	15.57	445.84	1.05	3.15	1.47
2000 /	825.79	77.02	21.84	718.03	1.65	4.95	2.31

CASE NUMBER-- 34 - 7% INFLATION
 GENERATION TYPE-- GAS COMBINED CYCLE
 LOCATION-- NORTH POLE
 FUEL SOURCE-- ALCAN
 PLANT FINANCING-- APA
 FUEL SUPPLY FINANCING-- PRIVATE
 FGD-- N.A.
 INSTALLED CAPACITY (MW)= 100.00
 CAPITAL COSTS(\$/KW)(1977\$)= 380.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 9000.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 9.40
 FINANCING DISCOUNT RATE(FRACTION)= 0.09800
 FACILITY CONSTRUCTION TIME(YEARS)= 2.
 PAYBACK PERIOD (YEARS)= 30.
 INSURANCE RATE (FRACTION)= 0.00250
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00350
 PLANT UTILIZATION FACTOR (FRACTION)
 0.40,0.60,0.60,0.60,0.60,0.50,0.40,
 UNIT FUEL COST (\$/MMBTU)
 2.00, 2.00, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47, 2.47,
 GENERAL INFLATION RATE(FRACTION)= 0.0700
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0950
 FUEL ESCALATION RATE(FRACTION)= 0.1000

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	O&M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	123.62	11.07	5.64	105.47	0.27	0.80	0.37
1985 /	199.49	17.43	7.91	171.89	0.42	1.25	0.58
1990 /	318.93	27.44	11.10	276.83	0.66	1.97	0.92
1995 /	510.20	43.20	15.57	445.24	1.04	3.11	1.45
2000 /	816.68	68.01	21.84	718.03	1.63	4.89	2.28

CASE NUMBER-- 40 - 7% INFLATION
 GENERATION TYPE-- HYDRO
 LOCATION-- BRADLEY LAKE
 FUEL SOURCE-- N.A.
 PLANT FINANCING-- APA
 FUEL SUPPLY FINANCING-- N.A.
 FGD-- N.A.
 INSTALLED CAPACITY (MW)= 70.00
 CAPITAL COSTS(\$/KW)(1977\$)= 2286.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 3500.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 9.28
 FINANCING DISCOUNT RATE(FRACTION)= 0.09800
 FACILITY CONSTRUCTION TIME(YEARS)= 5.
 PAYBACK PERIOD (YEARS)= 50.
 INSURANCE RATE (FRACTION)= 0.00100
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00000
 PLANT UTILIZATION FACTOR (FRACTION)
 0.52,0.52,0.52,0.52,0.52,0.52,0.52,0.52,0.52,0.52,0.52,0.52,
 UNIT FUEL COST (\$/MWHRTU)
 0.00, 0.00, 0.00, 0.00, 0.00, 0.00, 0.00, 0.00, 0.00, 0.00, 0.00,
 GENERAL INFLATION RATE(FRACTION)= 0.0700
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0950
 FUEL ESCALATION RATE(FRACTION)= 0.1000

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	OZM	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	80.32	65.63	9.05	0.00	0.66	4.98	0.00
1985 /	124.88	103.31	12.69	0.00	1.04	7.83	0.00
1990 /	194.42	152.64	17.80	0.00	1.64	12.33	0.00
1995 /	303.00	256.03	24.97	0.00	2.59	19.41	0.00
2000 /	472.71	403.05	35.02	0.00	4.07	30.56	0.00

CASE NUMBER-- 41 - 7% INFLATION
 GENERATION TYPE-- HYDRO
 LOCATION-- CHAKACHAMNA
 FUEL SOURCE-- N.A.
 PLANT FINANCING-- APA
 FUEL SUPPLY FINANCING-- N.A.
 FGD-- N.A.
 INSTALLED CAPACITY (MW)= 366.00
 CAPITAL COSTS(\$/KW)(1977\$)= 2196.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 3500.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 5.12
 FINANCING DISCOUNT RATE(FRACTION)= 0.09800
 FACILITY CONSTRUCTION TIME(YEARS)= 5.
 PAYBACK PERIOD (YEARS)= 50.
 INSURANCE RATE (FRACTION)= 0.00100
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00000
 PLANT UTILIZATION FACTOR (FRACTION)
 0.50,0.50,0.50,0.50,0.50,0.50,0.50,0.50,0.50,0.50,
 UNIT FUEL COST (\$/MMBTU)
 0.00, 0.00, 0.00, 0.00, 0.00, 0.00, 0.00, 0.00, 0.00, 0.00, 0.00,
 GENERAL INFLATION RATE(FRACTION)= 0.0700
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0950
 FUEL ESCALATION RATE(FRACTION)= 0.1000

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	0%M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	76.39	65.56	5.19	0.00	0.66	4.97	0.00
1985 /	119.37	103.21	7.28	0.00	1.04	7.83	0.00
1990 /	186.66	162.48	10.21	0.00	1.64	12.32	0.00
1995 /	292.09	255.79	14.33	0.00	2.59	19.39	0.00
2000 /	457.37	402.67	20.09	0.00	4.07	30.53	0.00

CASE NUMBER-- 42 - 7% INFLATION
 GENERATION TYPE-- HYDRO
 LOCATION-- WATANA ONLY
 FUEL SOURCE-- N.A.
 PLANT FINANCING-- APA
 FUEL SUPPLY FINANCING-- N.A.
 FGD-- N.A.
 INSTALLED CAPACITY (MW)= 686.00
 CAPITAL COSTS(\$/KW)(1977\$)= 1921.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 3500.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 1.63
 FINANCING DISCOUNT RATE(FRACTION)= 0.09800
 FACILITY CONSTRUCTION TIME(YEARS)= 6.
 PAYBACK PERIOD (YEARS)= 50.
 INSURANCE RATE (FRACTION)= 0.00100
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00000
 PLANT UTILIZATION FACTOR (FRACTION)
 0.58,0.58,0.58,0.58,0.58,0.58,0.58,0.58,0.58,0.58,0.58,
 UNIT FUEL COST (\$/MMBTU)
 0.00, 0.00, 0.00, 0.00, 0.00, 0.00, 0.00, 0.00, 0.00, 0.00,
 GENERAL INFLATION RATE(FRACTION)= 0.0700
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0950
 FUEL ESCALATION RATE(FRACTION)= 0.1000

LEVELIZED COST OF POWER (MILLS/KWH)

POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	O%M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	55.19	49.51	1.43	0.00	0.50	3.75	0.00
1985 /	86.64	77.94	2.00	0.00	0.79	5.91	0.00
1990 /	136.05	122.70	2.80	0.00	1.24	9.30	0.00
1995 /	213.69	193.16	3.93	0.00	1.95	14.64	0.00
2000 /	335.72	304.03	5.51	0.00	3.07	23.05	0.00

CASE NUMBER-- 43 - 7% INFLATION
 GENERATION TYPE-- HYDRO
 LOCATION-- WATANA + DEVIL CANYON
 FUEL SOURCE-- N.A.
 PLANT FINANCING-- APA
 FUEL SUPPLY FINANCING-- N.A.
 FGD-- N.A.
 INSTALLED CAPACITY (MW)= 1568.00
 CAPITAL COSTS(\$/KW)(1977\$)= 1275.00
 FIRST POWER ON LINE DATE(YEAR)= 1980.
 HEAT RATE (BTU/KWH)= 3500.
 OPERATING AND MAINTANCE COSTS(\$/KW)(1977\$)= 1.79
 FINANCING DISCOUNT RATE(FRACTION)= 0.09800
 FACILITY CONSTRUCTION TIME(YEARS)= 12.
 PAYBACK PERIOD (YEARS)= 50.
 INSURANCE RATE (FRACTION)= 0.00100
 TAX RATE (FRACTION)= 0.00750
 INTERIM REPLACEMENT RATE(FRACTION)= 0.00000
 PLANT UTILIZATION FACTOR (FRACTION)
 0.50,0.50,0.50,0.50,0.50,0.50,0.50,0.50,0.50,0.50,0.50,0.50,
 UNIT FUEL COST (\$/MMBTU)
 0.00, 0.00, 0.00, 0.00, 0.00, 0.00, 0.00, 0.00, 0.00, 0.00, 0.00, 0.00,
 GENERAL INFLATION RATE(FRACTION)= 0.0700
 CONSTRUCTION ESCALATION RATE(FRACTION)= 0.0950
 FUEL ESCALATION RATE(FRACTION)= 0.1000

LEVELIZED COST OF POWER (MILLS/KWH)

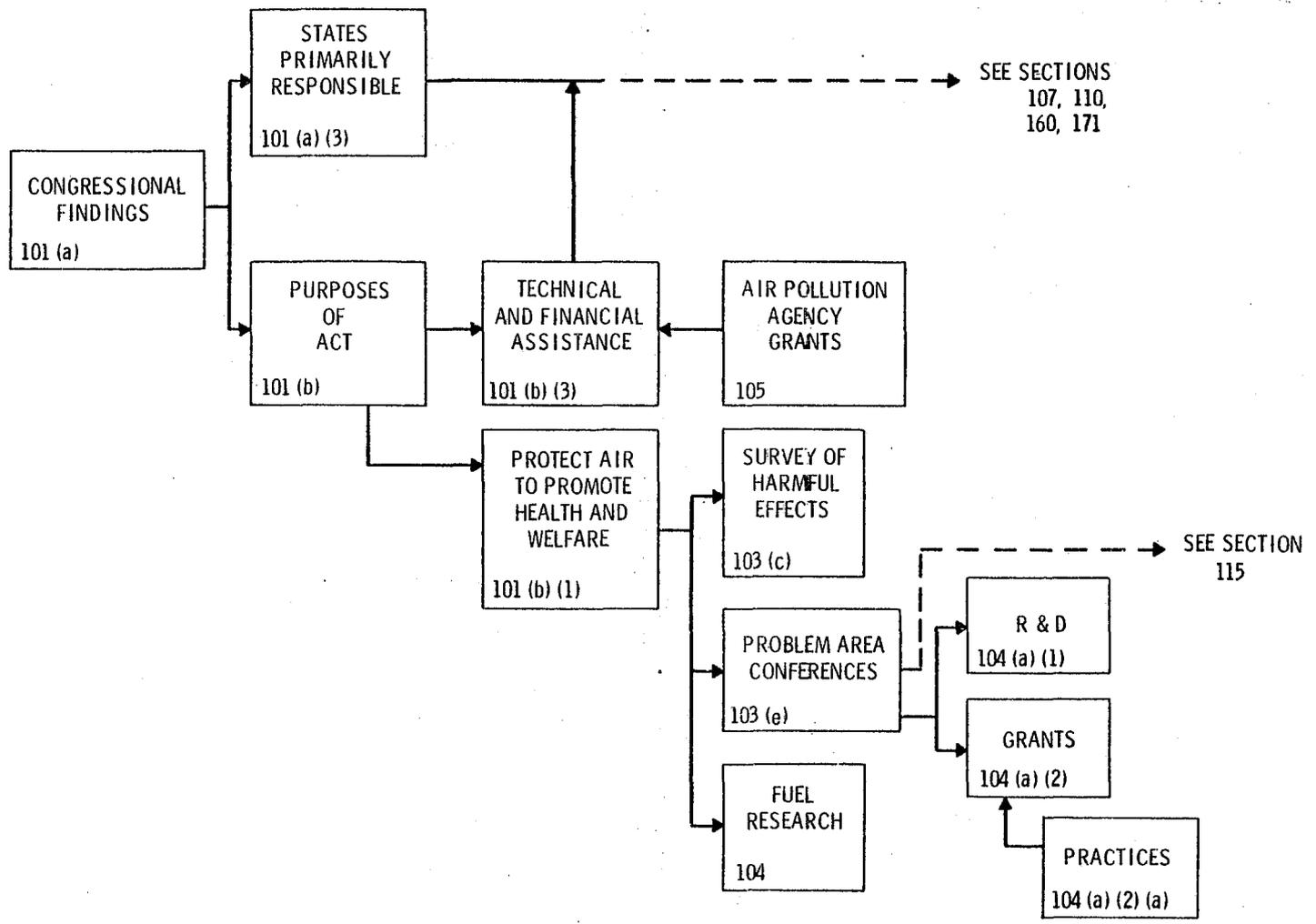
POWER ON / LINE DATE /	TOTAL BUS BAR	INTEREST % AMORIT	O%M	FUEL	INSUR.	TAXES	INTERM REP.
1980 /	43.55	38.43	1.82	0.00	0.39	2.91	0.00
1985 /	62.25	60.50	2.55	0.00	0.61	4.59	0.00
1990 /	107.00	95.25	3.57	0.00	0.96	7.22	0.00
1995 /	167.84	149.94	5.01	0.00	1.52	11.37	0.00
2000 /	263.35	230.05	7.03	0.00	2.39	17.90	0.00

E

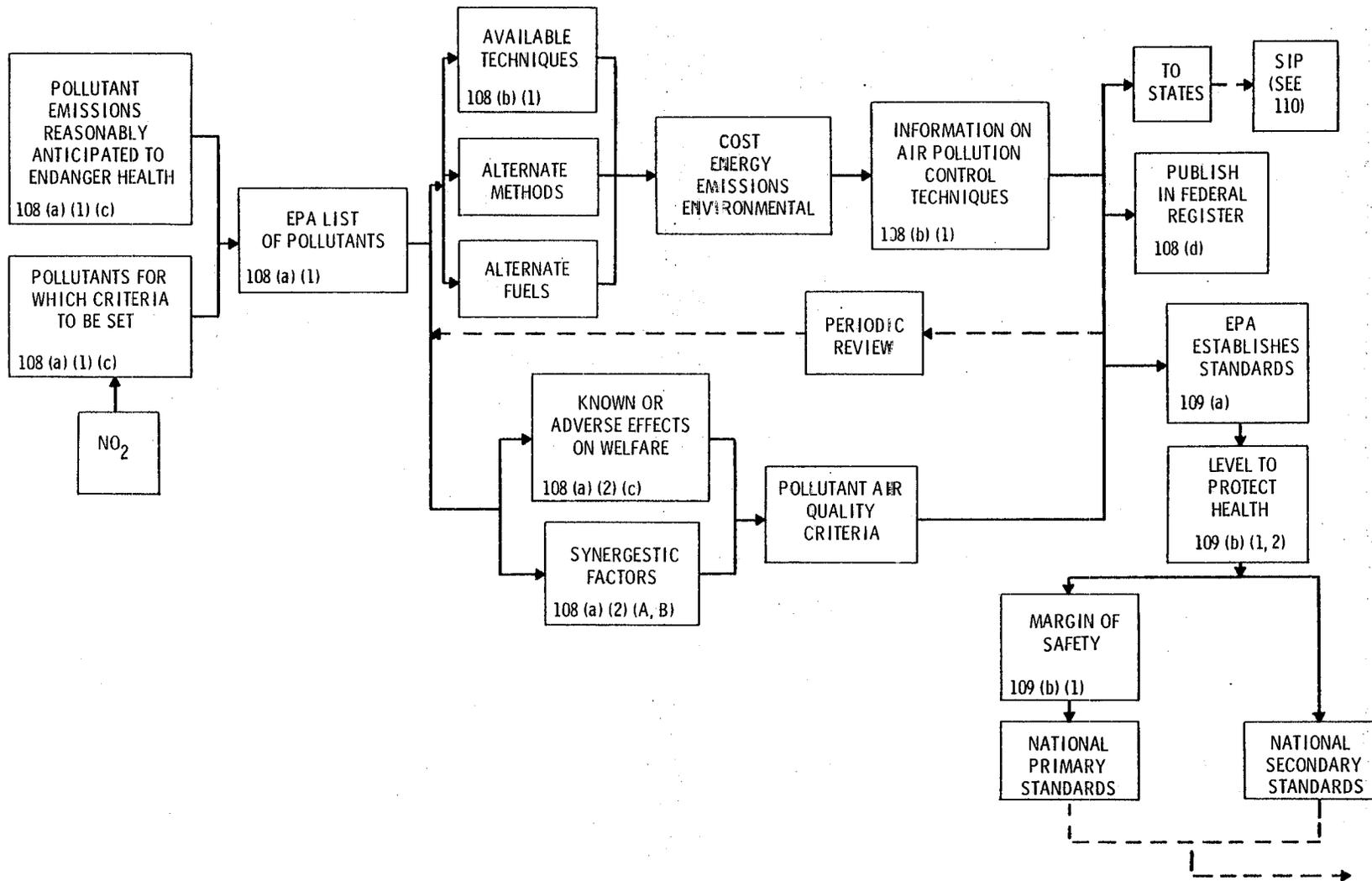
APPENDIX E

SCHEMATIC OUTLINE OF THE CLEAN AIR ACT

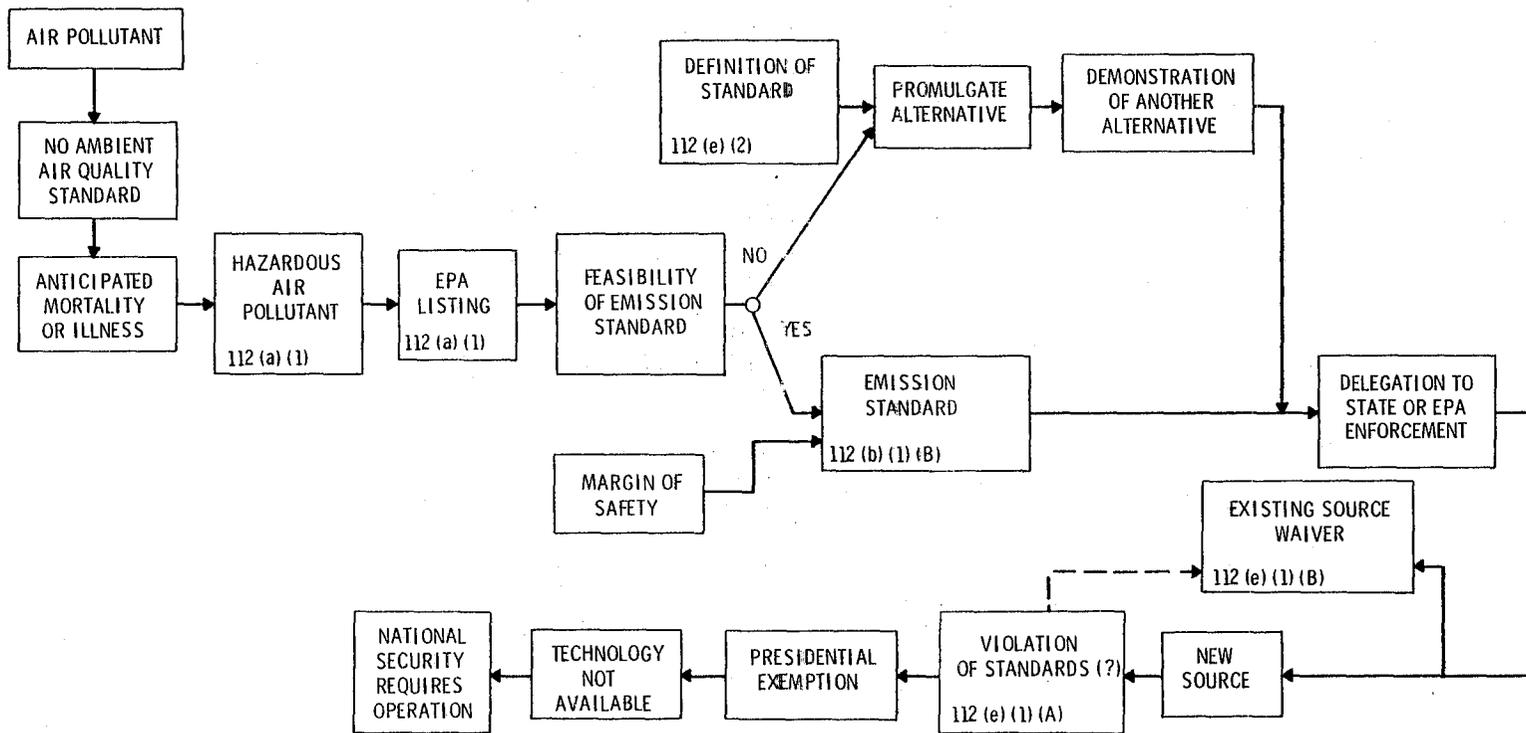
E-1



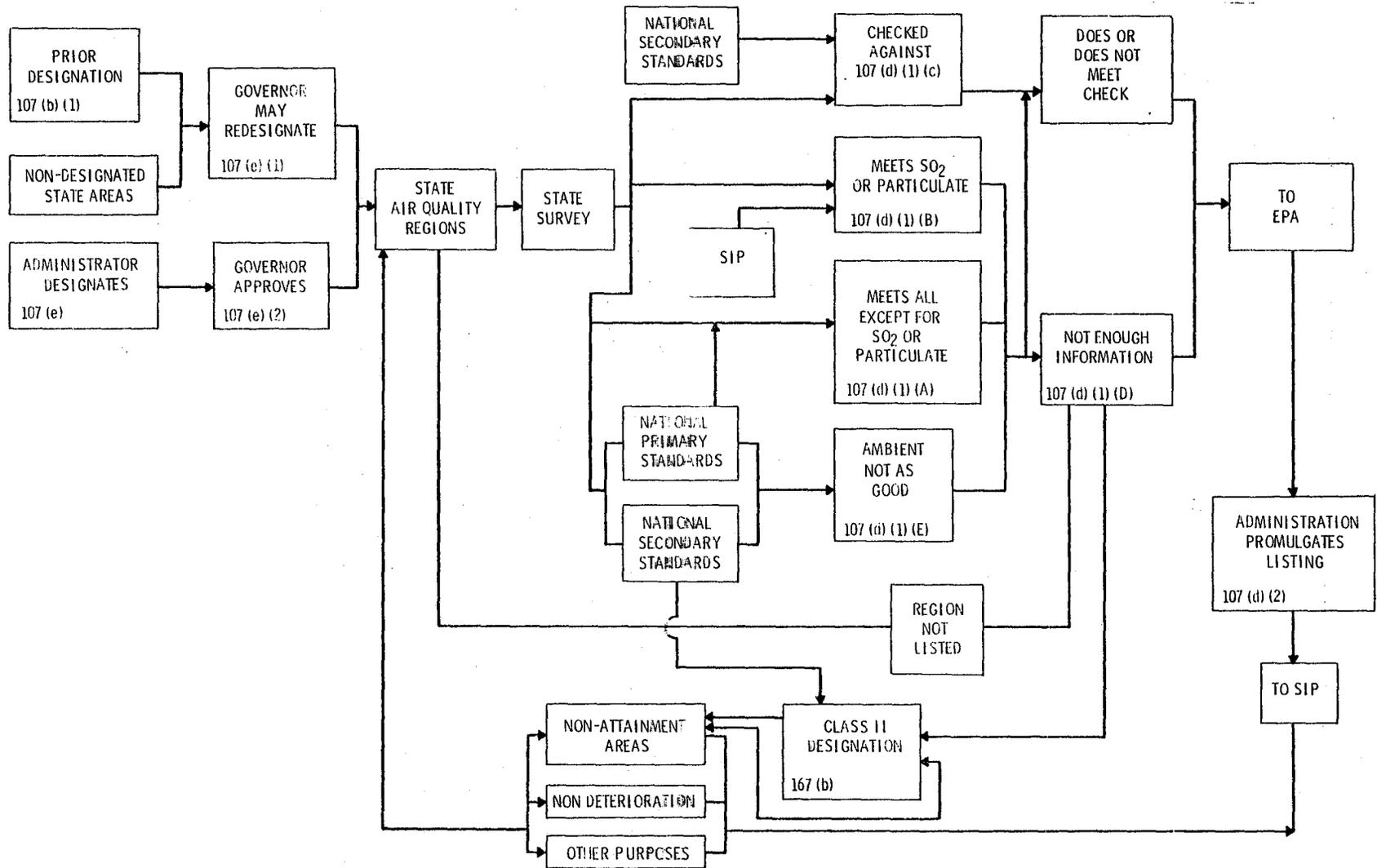
The States Have Primary Responsibility Subject To Federal Assurances That The Clean Air Act Is Being Satisfied



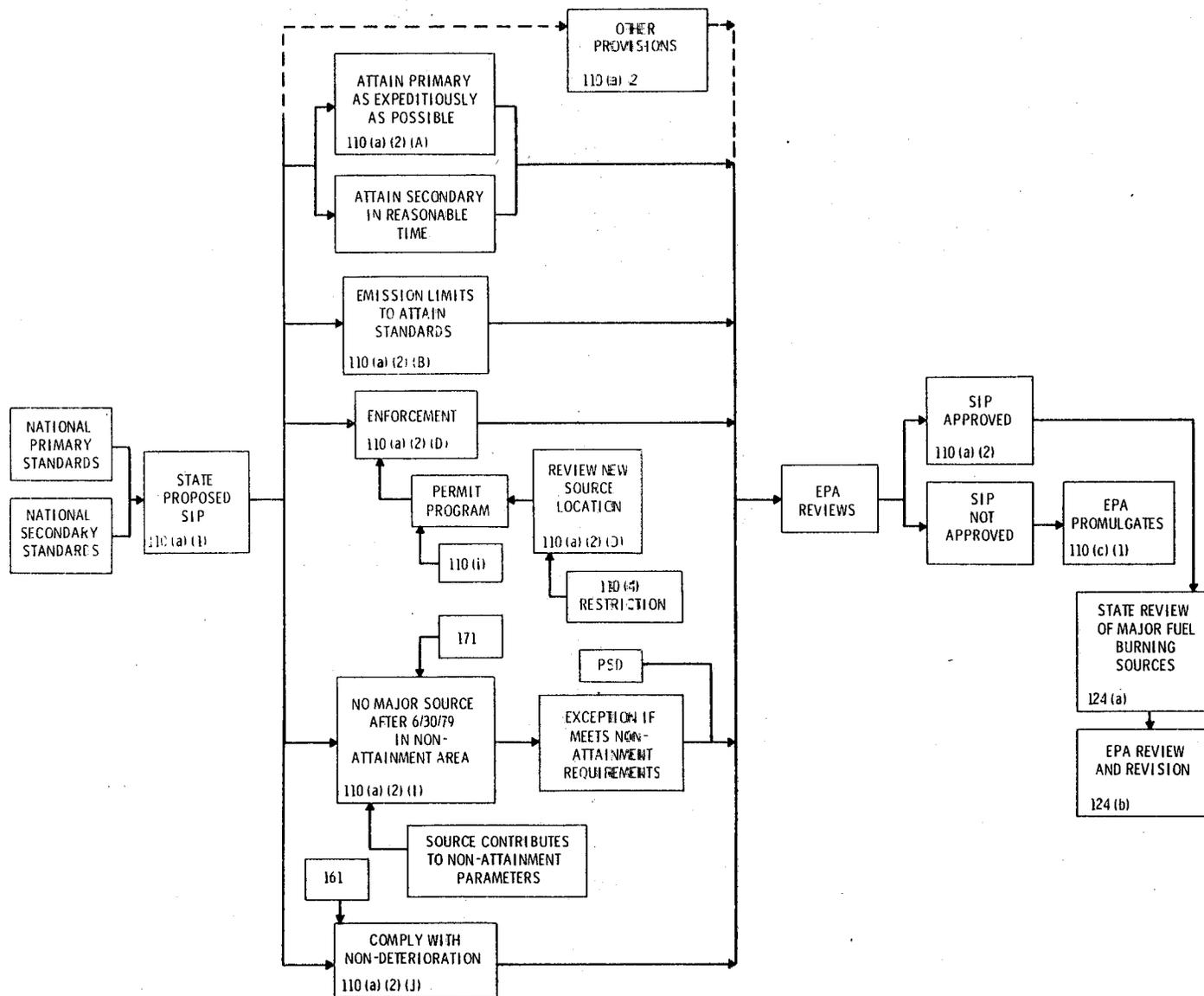
The Clean Air Act Requires Attainment of National Ambient Air Quality Standards Which Are Set By The Federal Government



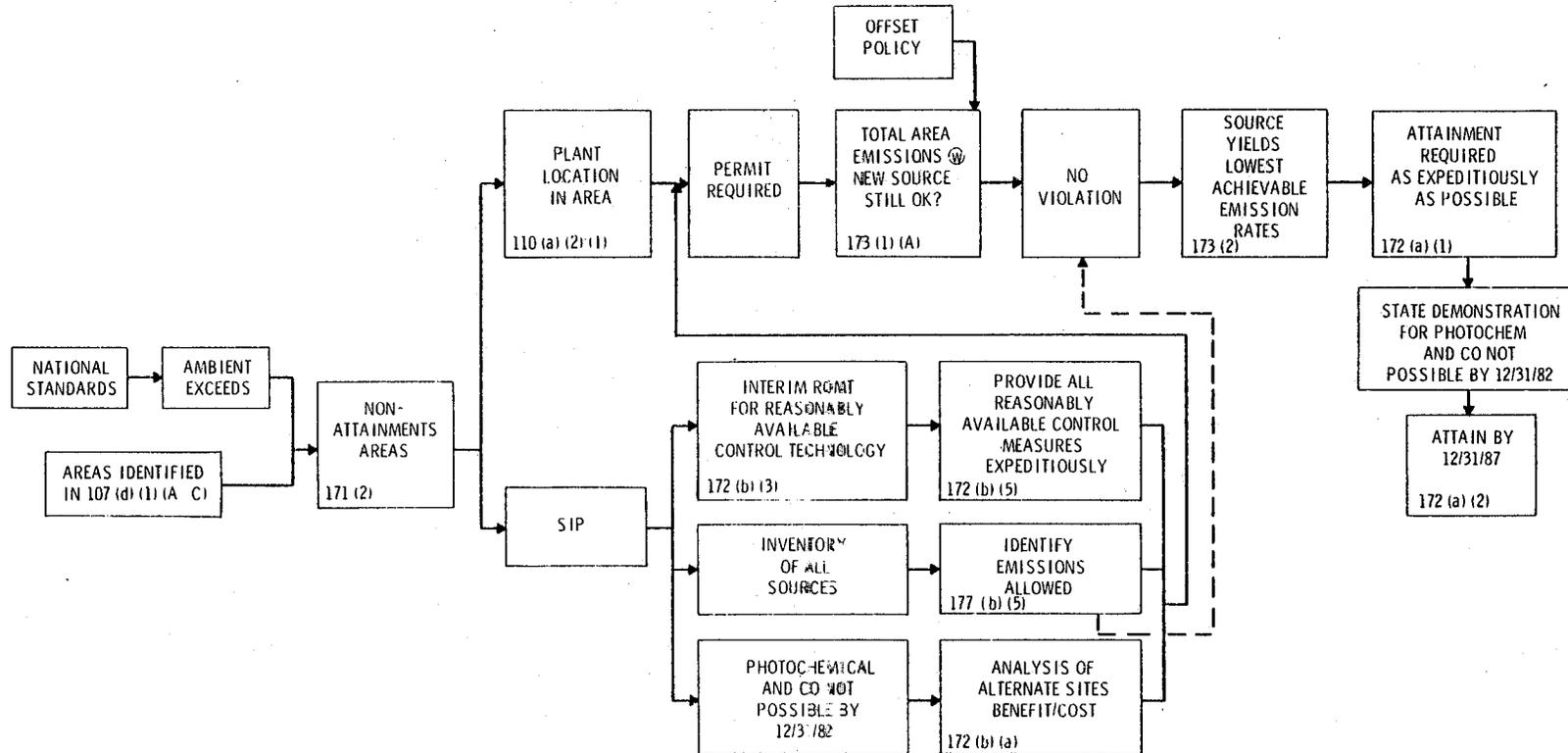
Identification Of Hazardous Air Pollutants Can Be Imposed As New Requirements Upon A Source



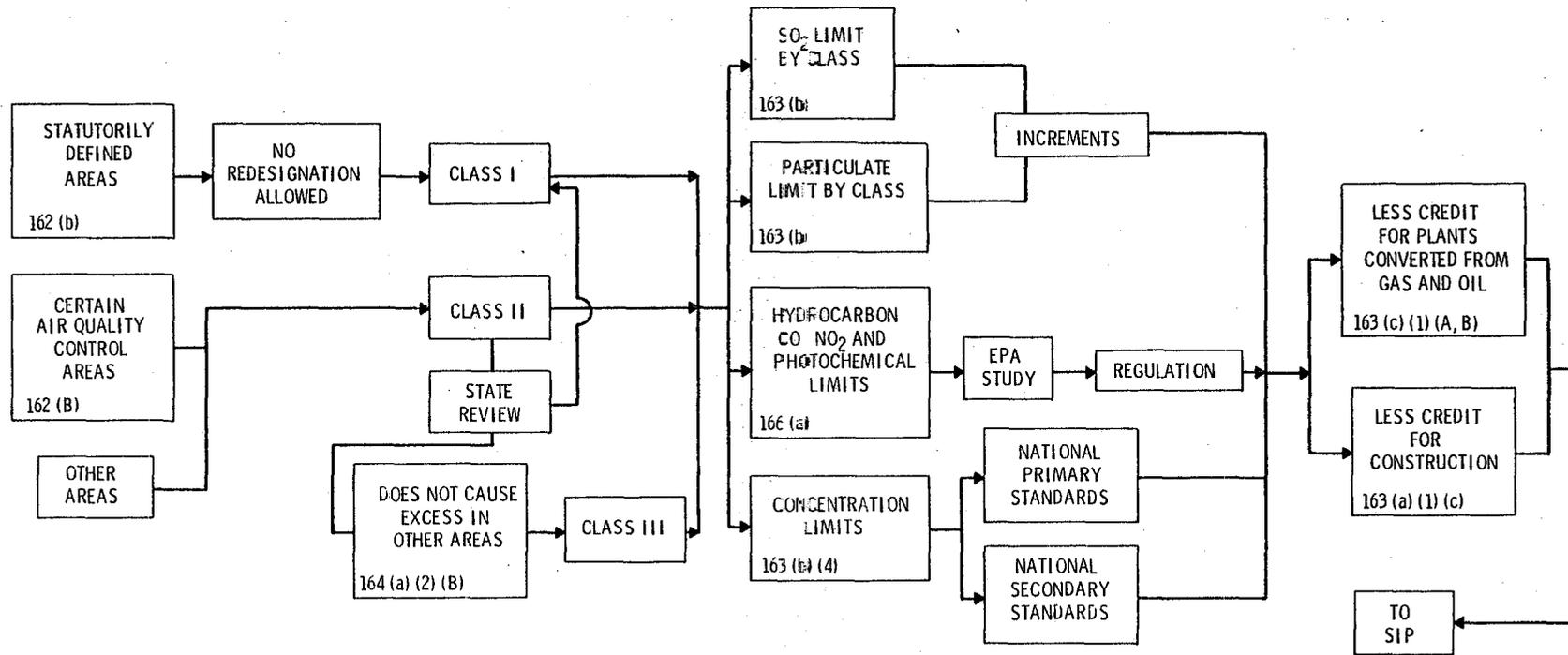
Air Quality Control Region Designations Now Are An Outer Geographic Limit To Non-attainment Areas



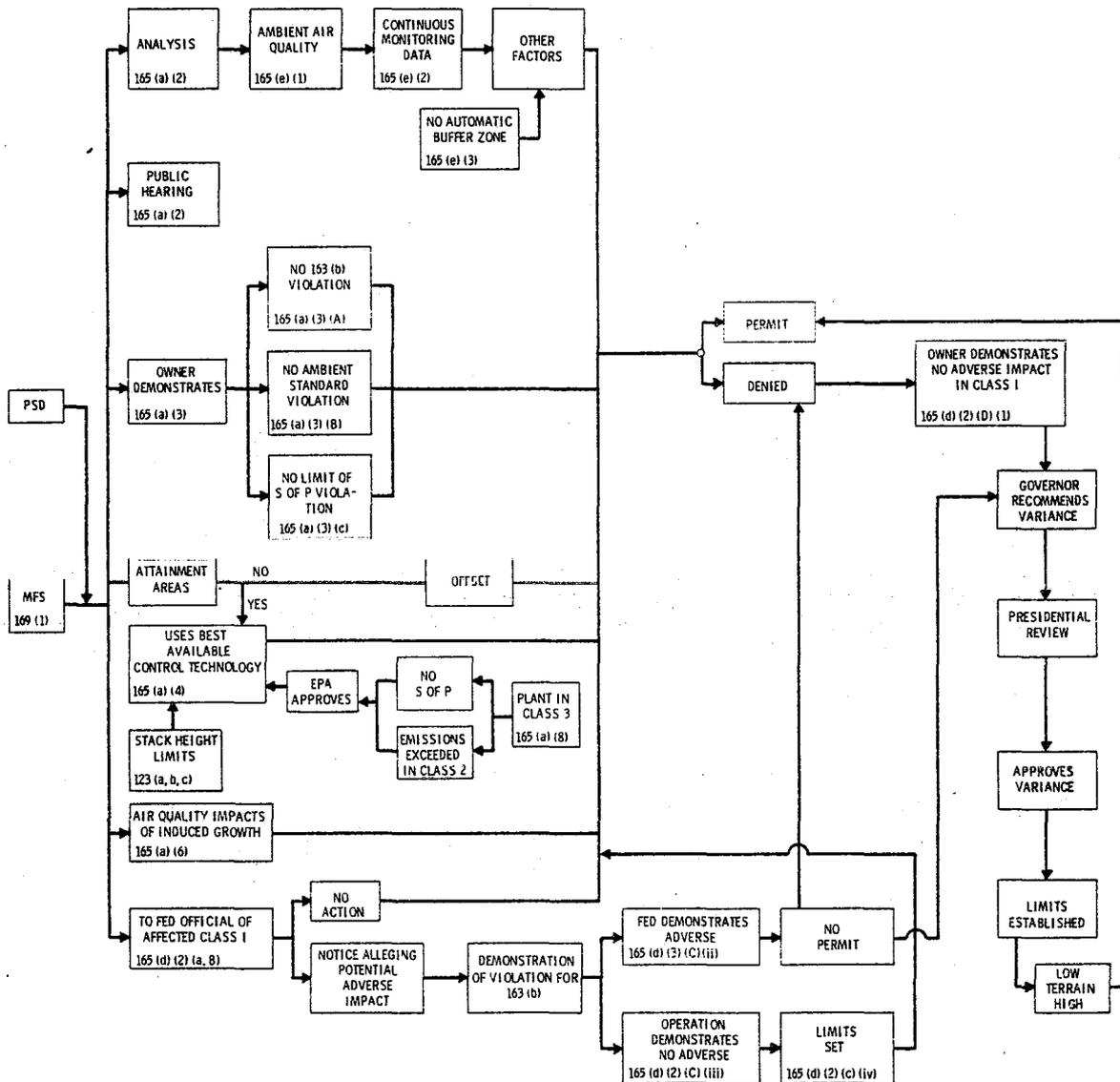
The Primary Tool For Implementation and Enforcement Of the Clean Air Act Is the State Implementation Plan



Plants In Non-Attainment Areas Must Achieve Lowest Achievable Emission Rates (LAER) and Comply With EPA's Offset Provisions



Plants Are Required To Limit Emissions Absolutely and Incrementally



Air Quality Analysis and Permitting Before Construction
Is Required To Avoid Air Quality Problems