

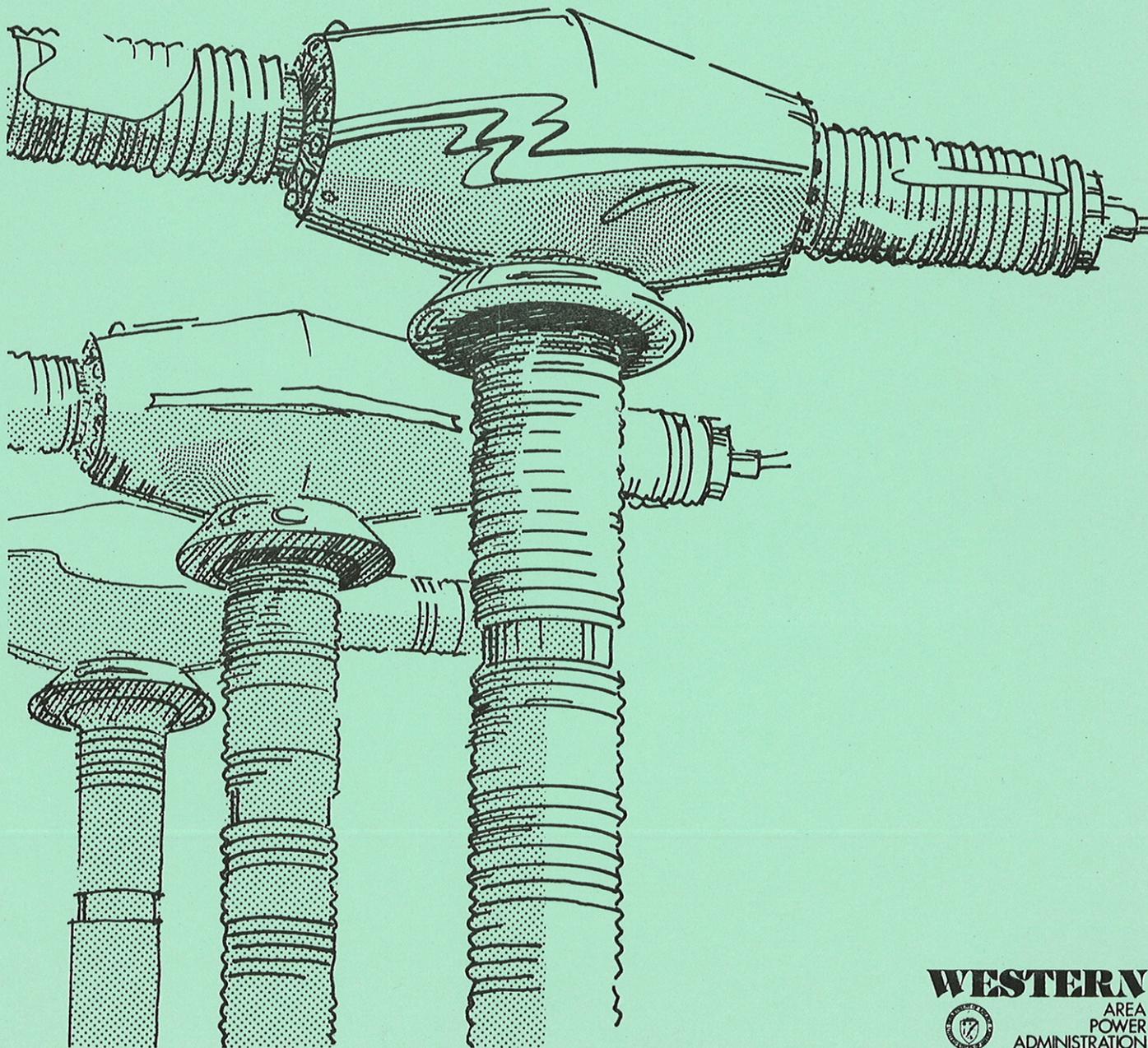
POST-1985 MARKETING PLAN EASTERN DIVISION

PICK-SLOAN MISSOURI BASIN PROGRAM

BILLINGS AREA

PUBLIC INFORMATION FORUM

JUNE 25, 26, 27, 1980 SIOUX FALLS, FARGO, BILLINGS



WESTERN AREA POWER ADMINISTRATION
BILLINGS AREA OFFICE
POST-1985 MARKETING PLAN

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INTRODUCTION

The Western Area Power Administration markets Federal power in a large 15-state area of the west from several projects.

The Billings Area of the Western Area Power Administration (Western) markets power from the Eastern Division of the Pick-Sloan Missouri Basin Program (Eastern Division).

The Eastern Division includes 8 powerplants, over 7300 miles of high-voltage transmission lines and 90 substations. The powerplants (located in Montana, North Dakota, and South Dakota) are owned and operated by the Corps of Engineers and the Water and Power Resources Service (formerly the Bureau of Reclamation). Transmission facilities are owned and operated by Western.

The Eastern Division transmission system is located in a 7-state area, including facilities in Missouri that effect an intertie with the Southwestern Power Administration. In the Eastern Division, Western markets power to 230 preference customers in a 6-state area and also delivers power to an irrigation district in Kansas.

Present commitments of commercial firm power (excluding project pumping) in the Eastern Division total 1982 MW in the summer and 1967 MW in the winter. Contractual commitments terminate during the period 1985-1990, with most commitments terminating on December 31, 1985.

Western announced in January 1979 that it was starting planning of post-1985 marketing. Preliminary public meetings were held in Sioux Falls and Billings in March 1979. Options available to Western were presented, and the opinion of customers and other interested parties was solicited. Many of you have written to Western giving comments on the options discussed in 1979. Those letters are on file and were considered in the preparation of this marketing study.

On May 13, 14, and 15, 1980, informal public information forums were held in Fargo, Sioux Falls, and Billings. A 73-page report was presented which included considerable information on the hydrology of the Missouri River and the power and energy available under various water conditions.

Options were still open at the May meetings. The May report presented 5 basic options, and comments from interested parties were requested. As of June 11, a total of 125 letters were received and analyzed. An additional 7 comments have been received as this report is written. All comments have been considered in development of Western's proposals for post-1985 marketing.

These June 1980 meetings are formal public information forums. A transcript of the transactions will be made. Availability of copies of the record will be announced at the meetings.

The June meetings will present Western's proposals for post-1985 marketing. This report contains those proposals. Said proposals include selections from the options presented in the May report. In addition, we propose that 1961 water conditions be used in determining adverse capability for the Eastern Division system. Also, new requirements for an energy conservation program by Western's firm power customers are set forth in this report.

We request comments from all customers and interested parties on the proposed post-1985 marketing plan for the Eastern Division, Pick-Sloan Missouri Basin Program. Written comments may be sent to James D. Davies, Area Manager, Billings Area Office, Western Area Power Administration, P.O. Box EGY, Billings, Montana 59101 anytime after June 27, 1980. Also, written and oral comments may be made at formal public comment forums to be held in late August. Public comment forums are scheduled for the following dates and places: August 22, Billings; August 25, Bismarck; August 26, Moorhead; August 27, Sioux City; August 28, Lincoln; and August 29, Pierre. Times and locations of meeting rooms will be announced later. The cut-off time for comments to be accepted as part of the record will be announced at the August forums.

OPTIONS AND PROPOSALS

In the May 1980 post-1985 marketing plan report, Western presented five basic option papers (subjects). Each paper or subject had several options available. Comments were requested on the several options set forth.

The following sheets in this section set forth the same option papers with Western's proposals added. In addition, two additional proposals are made. One proposal is that 1961 water conditions be used to determine adverse-year capability for the sale of firm capacity. Another proposal is that Western will require firm power customers who accept extended or new power commitments to adopt an energy conservation plan.

Western's proposed marketing plan is summarized at the end of this section.

OPTION PAPER I

POST-1985 MARKETING PLAN
EASTERN DIVISION, PICK-SLOAN MISSOURI BASIN PROGRAM

SUBJECT: MARKETING AREA - EXISTING RESOURCES - EXISTING FACILITIES

DESCRIPTION: THE MARKETING AREA OF THE EASTERN DIVISION IS DESCRIBED AS "MONTANA EAST OF THE CONTINENTAL DIVIDE, ALL OF NORTH AND SOUTH DAKOTA, NEBRASKA EAST OF THE 101° MERIDIAN, IOWA WEST OF THE 94½° MERIDIAN, AND MINNESOTA WEST OF A LINE ON THE 94½° MERIDIAN FROM THE SOUTHERN BOUNDARY OF THE STATE TO THE 46° PARALLEL AND THENCE NORTHWESTERLY TO THE NORTHERN BOUNDARY OF THE STATE AT THE 96½° MERIDIAN". SEE MAP.

OPTIONS:

1. LEAVE MARKETING AREA THE SAME.
2. EXPAND MARKETING AREA.
3. REDUCE MARKETING AREA.

PROPOSAL: LEAVE MARKETING AREA THE SAME.

REASONS:

1. THE PRESENT MARKETING AREA IS LOGICAL. IT ENCOMPASSES THAT PORTION OF THE MISSOURI RIVER VALLEY THAT CAN REASONABLY BE REACHED WITH EFFICIENT TRANSMISSION FROM EXISTING POWERPLANTS.

2. THE PRESENT MARKETING AREA WAS ESTABLISHED IN 1953. MOST EXISTING PREFERENCE CUSTOMERS WITHIN THE MARKETING AREA HAVE BEEN BUYING EASTERN DIVISION HYDROPOWER FOR 20 YEARS OR LONGER. THERE IS MUCH MORE PREFERENCE LOAD INSIDE THE PRESENT MARKETING AREA THAN THERE ARE FIRM HYDRORESOURCES AT EXISTING POWERPLANTS. EXPANSION OF THE MARKETING AREA WOULD PICK UP NEW PREFERENCE LOAD FOR WHICH THERE ARE NO NEW RESOURCES. SERVICE TO SUCH LOADS WOULD REQUIRE SIGNIFICANT REDUCTION OF COMMITMENTS TO EXISTING CUSTOMERS. CUSTOMERS WITHIN THE MARKETING AREA HAVE MADE COMPLEX POWER SUPPLY ARRANGEMENTS BASED ON RECEIPT OF FEDERAL HYDROPOWER. A CHANGE IN THE MARKETING AREA AT THIS TIME WOULD SERIOUSLY DISRUPT POWER SUPPLY TO THE AREA.
3. IF THE MARKETING AREA WERE EXPANDED, TRANSMISSION CAPACITY IN THE HEART OF THE EXISTING TRANSMISSION SYSTEM WOULD BE GREATER THAN NEEDED FOR WESTERN'S LOADS. ADDITIONAL TRANSMISSION TO THE EXPANDED AREA WOULD BE NEEDED.
4. REDUCTION OF THE MARKETING AREA WOULD TAKE SIGNIFICANT AMOUNTS OF FIRM POWER FROM EXISTING PREFERENCE CUSTOMERS WHO HAVE BEEN BUYING WESTERN POWER FOR ABOUT 20 YEARS OR MORE. MANY OF THESE CUSTOMERS BUY SUPPLEMENTAL POWER AT VERY HIGH PRICES. LOSS OF FEDERAL HYDROPOWER WOULD BE ECONOMICALLY DISASTROUS TO SUCH CUSTOMERS. THOSE CUSTOMERS WHO EMPLOY THEIR OWN GENERATION COULD EXPERIENCE A SHORT FALL OF GENERATION CAPACITY.

COMMENTS RECEIVED: OF THOSE PARTIES WHO COMMENTED ON THIS SUBJECT, 94 PERCENT RECOMMENDED THAT THE MARKETING AREA BE LEFT THE SAME.

MISSOURI RIVER BASIN POWER SYSTEMS

EXISTING AND POTENTIAL PLANTS, FEDERALLY OWNED

NAME PLATE RATING IN MW

MONTANA	
1 Aillenspur	250
2 Canyon Ferry	50
3 Fort Peck	165
4 Yellowstone	250

WYOMING

1 Alcova	36
2 Bald Ridge	23
3 Baysen	15
4 Fremont Canyon	48
5 Glendo	24
6 Guernsey	4.8
7 Heart Mountain	5
8 Hunter Mountain	14.4
9 Kortes	36
10 Seminoe	32.4
11 Sheridan	25
12 Shoshone	6
13 Sunlight	15
14 Thief Creek	125

COLORADO

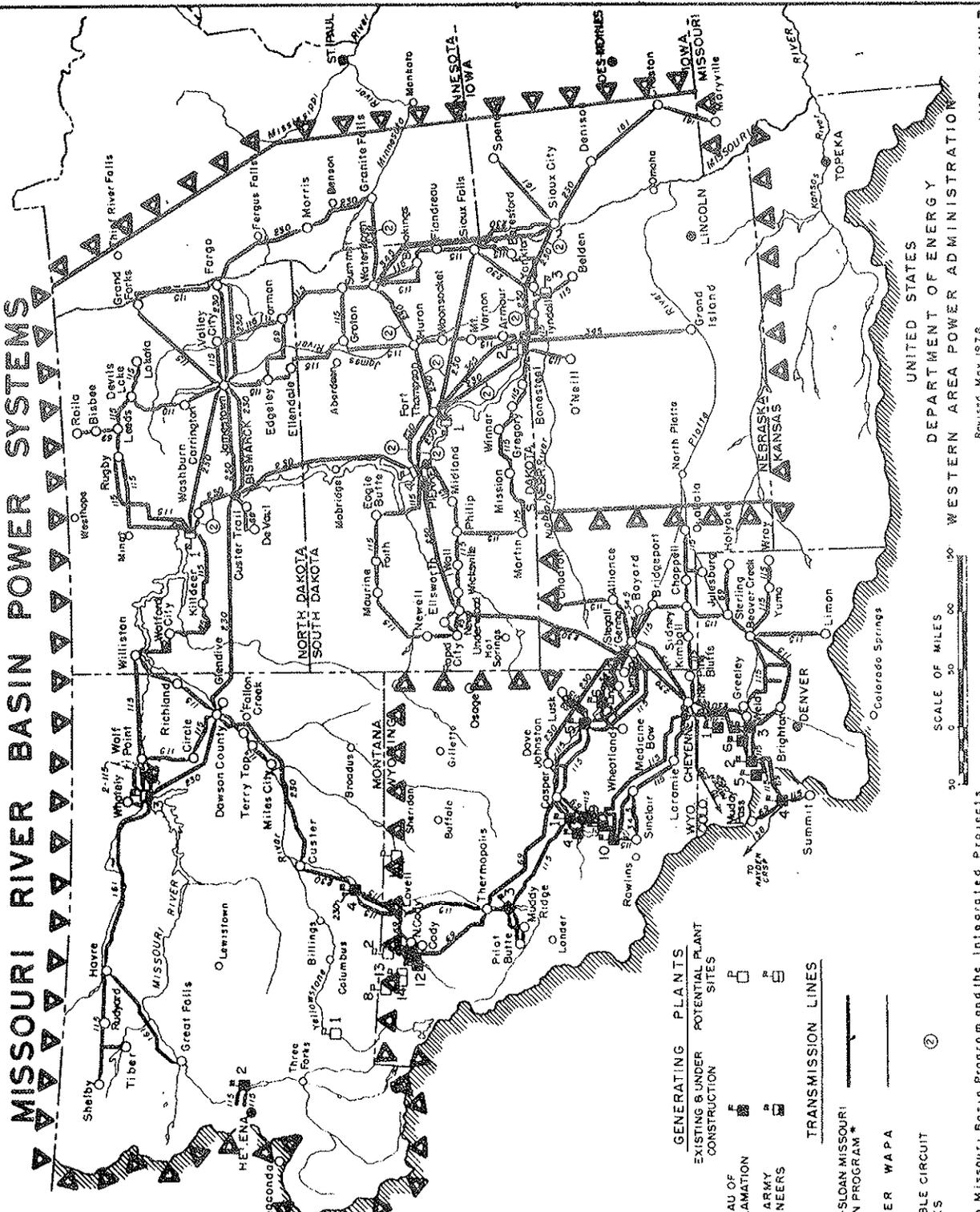
1 Big Thompson	4.5
2 Estes	45
3 Flatiron	71.5
4 Green Mountain	21.6
5 Morys Lake	8.1
6 Polehill	33.25

NORTH DAKOTA

1 Garrison	400
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SOUTH DAKOTA

1 Big Bend	468
2 Fort Randall	320
3 Gavins Point	100
4 Oahe	595



GENERATING PLANTS

EXISTING UNDER CONSTRUCTION

BUREAU OF RECLAMATION	⊠
U.S. ARMY ENGINEERS	⊡
PICK-SLOAN MISSOURI BASIN PROGRAM*	⊞
OTHER WAPA	⊟
DOUBLE CIRCUIT LINES	⊕

POTENTIAL PLANT SITES

P	⊠
⊡	⊡
⊞	⊞
⊟	⊟

TRANSMISSION LINES

PICK-SLOAN MISSOURI BASIN PROGRAM*	⊞
OTHER WAPA	⊟
DOUBLE CIRCUIT LINES	⊕

* Includes Facilities of the Pick-Sloan Missouri Basin Program and the Integrated Projects (Fort Peck, Colorado-Big Thompson, Kendrick, North Platte, and Shoshone)

UNITED STATES
DEPARTMENT OF ENERGY
WESTERN AREA POWER ADMINISTRATION

Revised May 1978
Revised & Redrawn by E.D. Billings, Montana-April, 1962 MAP No. X-W-7

WAPA
BAO
APRIL 1980
SHEET 1 OF 2
REV. JUNE 1980

OPTION PAPER 1A

POST-1985 MARKETING PLAN
EASTERN DIVISION, PICK-SLOAN MISSOURI BASIN PROGRAM

SUBJECT: MARKETING AREA - NEW RESOURCES - NEW FACILITIES

DESCRIPTION: FORMAL MARKETING AREA HAS NOT BEEN ESTABLISHED FOR POSSIBLE NEW RESOURCES SUCH AS GREGORY COUNTY PUMPED STORAGE, MANITOBA HYDRO IMPORTS OR OTHER TOTALLY NEW RESOURCES.

OPTIONS:

1. LEAVE MARKETING AREA THE SAME.
2. EXPAND MARKETING AREA.
 - A. CONSIDER SERVICE TO EXPANDED AREA ON A CASE BY CASE BASIS. (RESOURCES AND CUSTOMERS.)
 - B. CONSIDER SERVICE TO EXPANDED AREA FOR ALL RESOURCES AT NEW FACILITIES AND ALL PREFERENCE ENTITIES.
3. REDUCE MARKETING AREA.

PROPOSAL: EXPAND THE MARKETING AREA FOR MARKETING NEW RESOURCES AT NEW FACILITIES TO INCLUDE ALL OR PARTS OF THE MISSOURI BASIN STATES OF MONTANA, NORTH DAKOTA, SOUTH DAKOTA, MINNESOTA, IOWA, NEBRASKA, AND KANSAS.

CONSIDER SERVICE TO THE EXPANDED AREA ON A CASE BY CASE BASIS -- THAT IS DETERMINE THE EXPANDED MARKETING AREA FOR EACH NEW RESOURCE AT A NEW FACILITY AND CONSIDER CUSTOMERS IN THE EXPANDED AREA ON A CASE BY CASE BASIS.

REASONS:

1. THE PRESENT MARKETING AREA FOR EXISTING RESOURCES IS VERY PRECISE AND DOES NOT ALLOW FOR LONG-TERM FIRM COMMITMENTS TO OUTSIDE-MARKET-AREA-PREFERENCE ENTITIES. WESTERN CAN SEE ADVANTAGES TO HAVING THE ABILITY TO MARKET SOME PART OF NEW SPECIAL RESOURCES TO CUSTOMERS IN THE EXPANDED MARKETING AREA. FOR EXAMPLE, IT MIGHT BE NECESSARY TO MARKET A PORTION OF GREGORY COUNTY PUMPED STORAGE CAPACITY TO ENTITIES OUTSIDE THE PRESENT MARKETING AREA IN ORDER TO OBTAIN SUFFICIENT PUMPING ENERGY.
2. THIS PROPOSAL DOES NOT NECESSARILY MEAN THAT ALL NEW RESOURCES AT NEW FACILITIES WOULD BE MARKETED TO AN EXPANDED MARKETING AREA. HOWEVER, IT WOULD GIVE WESTERN THE FLEXIBILITY TO TAKE TAKE SUCH ACTION IN THE FUTURE IF IT SHOULD BE DESIRABLE TO DO SO.

COMMENTS RECEIVED: OF THOSE PARTIES WHO COMMENTED ON THIS SUBJECT, 85 PERCENT RECOMMENDED THAT THE MARKETING AREA BE LEFT THE SAME OR THAT ENTITIES WITHIN THE EXISTING MARKETING AREA BE SATISFIED (GIVEN A RIGHT OF FIRST REFUSAL) BEFORE POWER IS MARKETED TO AN EXPANDED AREA. ONE RATHER COMMON COMMENT WAS THAT WESTERN SHOULD FOLLOW A LIST OF PRIORITIES IN MARKETING FUTURE NEW RESOURCES AND THAT FIRM COMMITMENTS TO AN EXPANDED AREA SHOULD BE ON A SHORTER TERM: (1) PREFERENCE CUSTOMERS INSIDE THE PRESENT MARKETING AREA, (2) PREFERENCE CUSTOMERS OUTSIDE THE PRESENT MARKETING AREA, (3) NONPREFERENCE CUSTOMERS INSIDE THE PRESENT MARKETING AREA, AND (4) NONPREFERENCE CUSTOMERS OUTSIDE THE PRESENT MARKETING AREA. ON THE OTHER HAND, 15 PERCENT OF THE COMMENTS RECOMMEND SERVICE TO AN EXPANDED AREA. MOST OF THESE COMMENTS RECOMMENDED SERVICE ON A CASE BY CASE BASIS.

ALTHOUGH WE UNDERSTAND THE REASONS OF THOSE WHO RECOMMENDED THAT THE MARKETING AREA REMAIN THE SAME, WE BELIEVE THE FLEXIBILITY TO MARKET CERTAIN NEW RESOURCES TO AN EXPANDED AREA ON A CASE BY CASE BASIS WOULD BE HIGHLY DESIRABLE.

WAPA
BAO
JUNE 1980

LOAD DATA BY AREAS

THE SUBJECTS OF THE MARKETING AREAS RECEIVED BY FAR THE GREATEST NUMBER OF COMMENTS. BECAUSE OF THE EXTREME INTEREST IN THESE SUBJECTS, WE HAVE PREPARED DATA SHOWING THE TOTAL LOAD OF PREFERENCE ENTITIES IN DIFFERENT AREAS. ACTUAL LOADS ARE SHOWN FOR 1978 AND ESTIMATED LOADS ARE SHOWN FOR 1980 AND 1988.

FOR LOADS OF PREFERENCE ENTITIES INSIDE THE PRESENT MARKETING AREA, A COMPARISON IS MADE BETWEEN TOTAL LOADS AND EXISTING FIRM COMMITMENTS. FOR LOADS OF PREFERENCE ENTITIES IN AN EXPANDED MARKETING AREA, A COMPARISON IS MADE BETWEEN TOTAL LOADS AND THE SALEABLE CAPACITY OF GREGORY COUNTY PUMPED STORAGE.

THERE ARE 4 SHEETS OF TABLES FOLLOWED BY 4 SHEETS OF GRAPHS. WE BELIEVE THE INFORMATION PRESENTED WILL BE OF INTEREST TO THOSE READING THIS REPORT. IT POINTS UP THE SIZE OF PREFERENCE ENTITY LOADS IN THE MISSOURI BASIN AND THE LARGE AMOUNT OF PREFERENCE GENERATION THAT EXISTS. THE DATA ALSO SHOW THE EFFECT GREGORY COUNTY PUMPED STORAGE COULD HAVE ON AREA SUPPLY.

EXISTING INSIDE MARKET
 AREA CUSTOMERS

	<u>TOTAL LOAD ^{1/}</u>	
	<u>SUMMER</u> (MW)	<u>WINTER</u> (MW)
1978 ACTUAL	5940	5217
1980 ESTIMATED	6599	5796
1988 ESTIMATED	10051	8827

EXISTING SALEABLE RESOURCES ^{2/}
AS A % OF TOTAL LOAD

	<u>SUMMER</u>	<u>WINTER</u>
	(%)	(%)
1978	33.4	38.6
1980	30.1	34.7
1988	19.7	22.8

SALEABLE GREGORY COUNTY ^{3/}
AS A % OF TOTAL LOAD

	<u>SUMMER</u>	<u>WINTER</u>
	(%)	(%)
1978	18.1	20.6
1980	16.3	18.5
1988	10.7	12.2

^{1/} ESTIMATES BASED ON 5.4% ANNUAL LOAD GROWTH AS REPORTED BY
 MAPP POOL FOR PAST YEARS' EXPERIENCE

^{2/} EXISTING SALEABLE RESOURCES: SUMMER 1984 MW; WINTER 2012 MW

^{3/} 1180 MW GREGORY COUNTY DIVIDED BY 1.10 EQUALS 1073 MW SALEABLE

TOTAL LOAD OF ALL PREFERENCE ENTITIES INSIDE THE MARKET AREA

	<u>TOTAL LOAD</u> ^{1/}			
	<u>SUMMER</u>		<u>WINTER</u>	
	<u>LOAD</u>	<u>INCREASE</u>	<u>LOAD</u>	<u>INCREASE</u>
	<u>FROM SHEET 1</u>	<u>FROM SHEET 1</u>	<u>FROM SHEET 1</u>	<u>FROM SHEET 1</u>
	(MW)	(MW)	(MW)	(MW)
1978 ACTUAL	6115	175	5347	130
1980 ESTIMATED	6793	194	5940	144
1988 ESTIMATED	10347	296	9047	220

EXISTING SALEABLE RESOURCES ^{2/}
AS A % OF TOTAL LOAD

	<u>SUMMER</u>	<u>WINTER</u>
	(%)	(%)
1978	32.4	37.6
1980	29.2	33.9
1988	19.2	22.2

SALEABLE GREGORY COUNTY ^{3/}
AS A % OF TOTAL LOAD

	<u>SUMMER</u>	<u>WINTER</u>
	(%)	(%)
1978	17.5	20.1
1980	15.8	18.1
1988	10.4	11.9

^{1/} ESTIMATES BASED ON 5.4% ANNUAL LOAD GROWTH AS REPORTED BY MAPP POOL FOR PAST YEARS' EXPERIENCE

^{2/} EXISTING SALEABLE RESOURCES: SUMMER 1984 MW; WINTER 2012 MW

^{3/} 1180 MW GREGORY COUNTY DIVIDED BY 1.10 EQUALS 1073 MW SALEABLE

WAPA
 BAO
 6/16/80
 SHEET 3 OF 4

TOTAL LOAD OF PREFERENCE ENTITIES INSIDE MARKET
 AREA PLUS BALANCE OF LOADS OF MKA, CPA, UPA, CORN BELT,
 CIPCO AND MUNICIPALITIES ON THESE COOPERATIVE'S SYSTEMS
THAT ARE OUTSIDE THE EASTERN DIVISION MARKETING AREA

	<u>TOTAL LOAD^{1/}</u>			
	<u>SUMMER</u>		<u>WINTER</u>	
	<u>LOAD</u>	<u>INCREASE</u>	<u>LOAD</u>	<u>INCREASE</u>
	<u>(MW)</u>	<u>FROM SHEET 2</u>	<u>(MW)</u>	<u>FROM SHEET 2</u>
		<u>(MW)</u>		<u>(MW)</u>
1978 ACTUAL	7042	927	6441	1094
1980 ESTIMATED	7823	1030	7155	1215
1988 ESTIMATED	11915	1568	10898	1851

	<u>SALEABLE GREGORY COUNTY^{2/}</u>	
	<u>AS A % OF TOTAL LOAD</u>	
	<u>SUMMER</u>	<u>WINTER</u>
	<u>(%)</u>	<u>(%)</u>
1978	15.2	16.7
1980	13.7	15.0
1988	9.0	9.8

^{1/} ESTIMATES BASED ON 5.4% ANNUAL LOAD GROWTH AS REPORTED
 BY MAPP POOL FOR PAST YEARS' EXPERIENCE

^{2/} 1180 MW GREGORY COUNTY DIVIDED BY 1.10 EQUALS 1073 MW
 SALEABLE

TOTAL LOAD OF PREFERENCE ENTITIES INSIDE
 MARKET AREA PLUS THE BALANCE OF MINNESOTA
 AND IOWA PLUS ALL OF KANSAS

TOTAL LOAD ^{1/}

	<u>SUMMER</u>		<u>WINTER</u>	
	INCREASE		INCREASE	
	<u>LOAD</u>	<u>FROM SHEET 3</u>	<u>LOAD</u>	<u>FROM SHEET 3</u>
	(MW)	(MW)	(MW)	(MW)
1978 ACTUAL	9700	2658	8805	2364
1980 ESTIMATED	10776	2953	9782	2627
1988 ESTIMATED	16413	4498	14898	4000

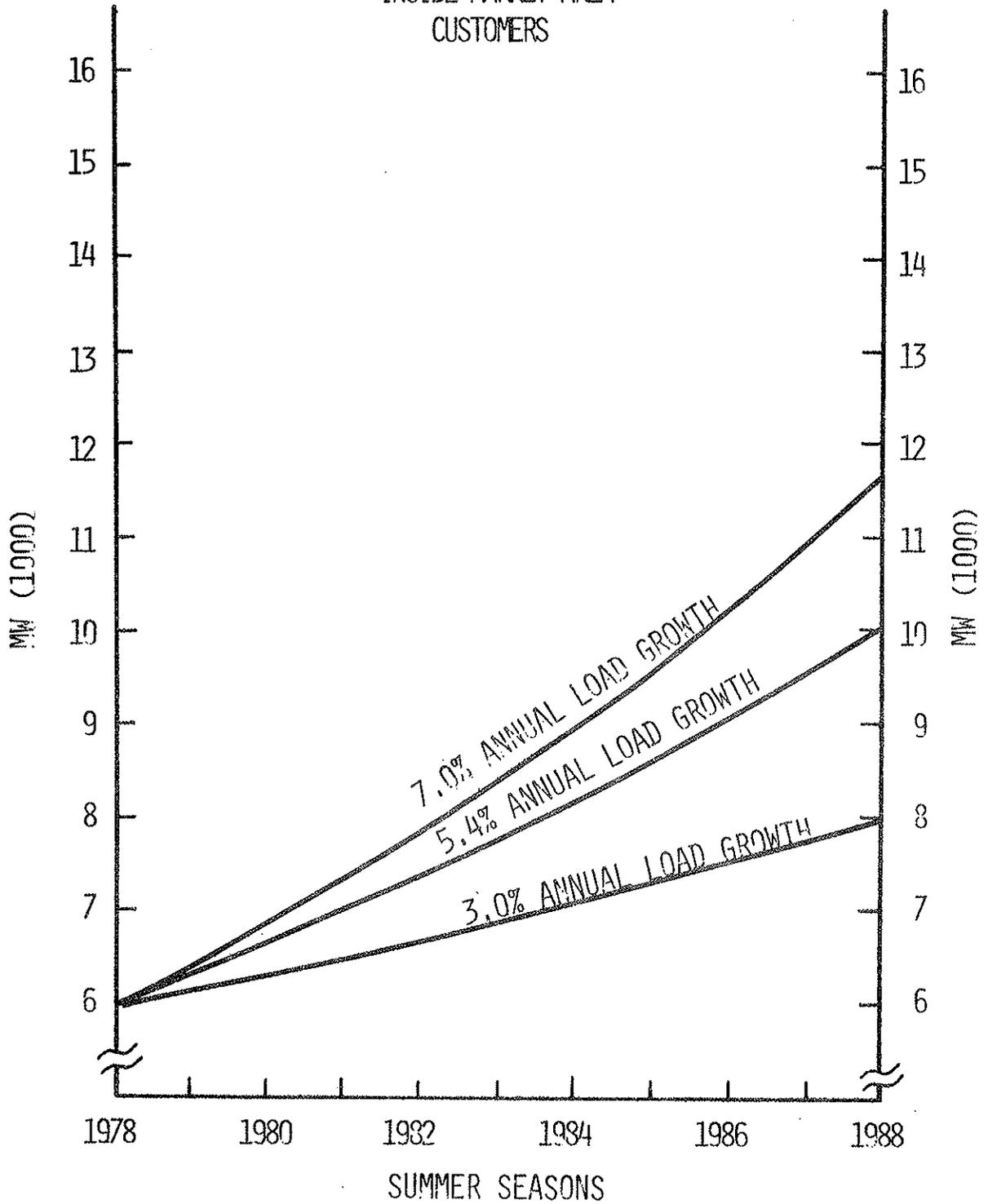
SALEABLE GREGORY COUNTY ^{2/}
AS A % OF TOTAL LOAD

	<u>SUMMER</u>	<u>WINTER</u>
	(%)	(%)
1978	11.1	12.2
1980	10.0	11.0
1988	6.5	7.2

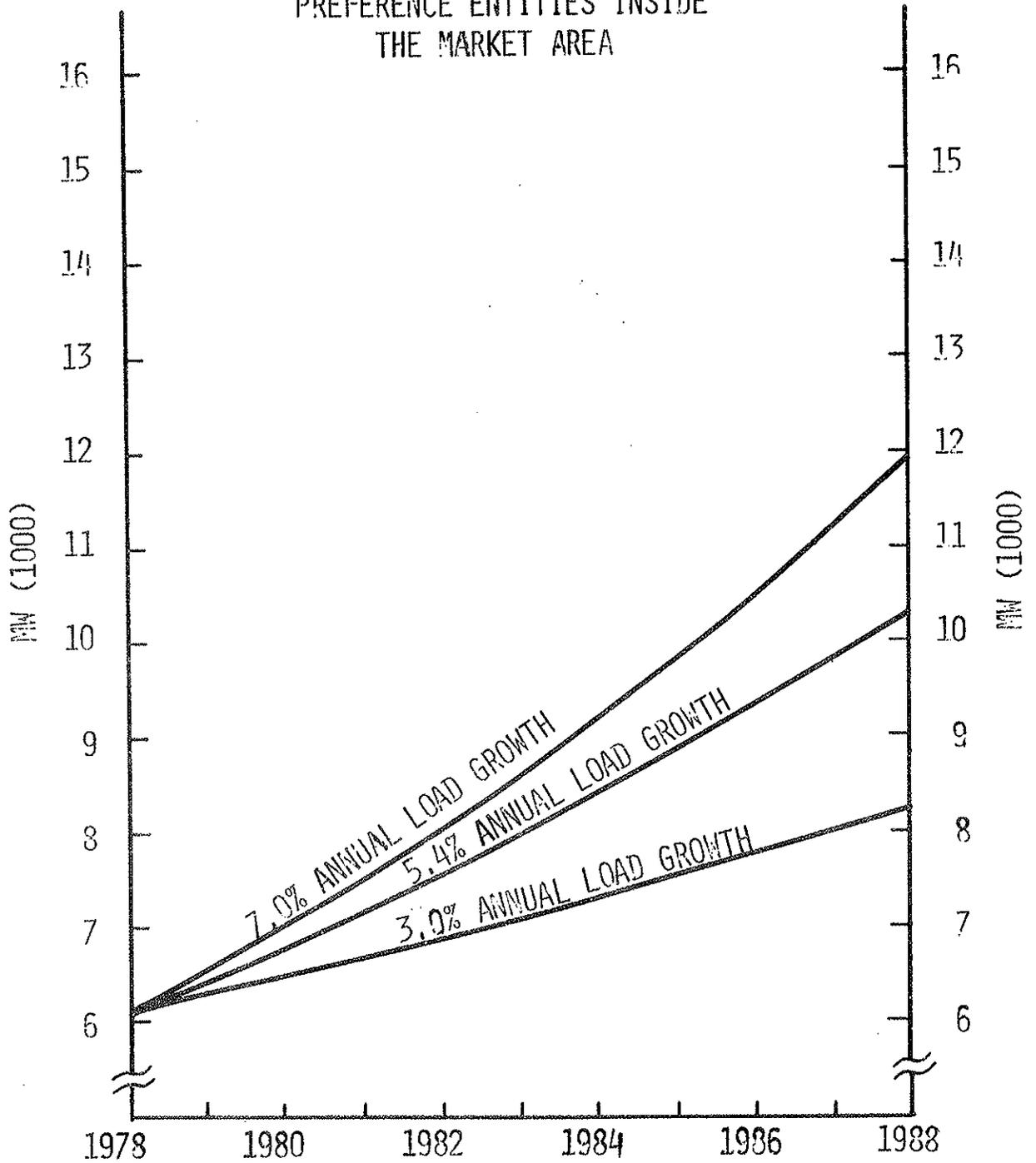
^{1/} ESTIMATES BASED ON 5.4% ANNUAL LOAD GROWTH AS REPORTED
 BY MAPP POOL FOR PAST YEARS' EXPERIENCE

^{2/} 1180 MW GREGORY COUNTY DIVIDED BY 1.10 EQUALS 1073 MW
 SALEABLE

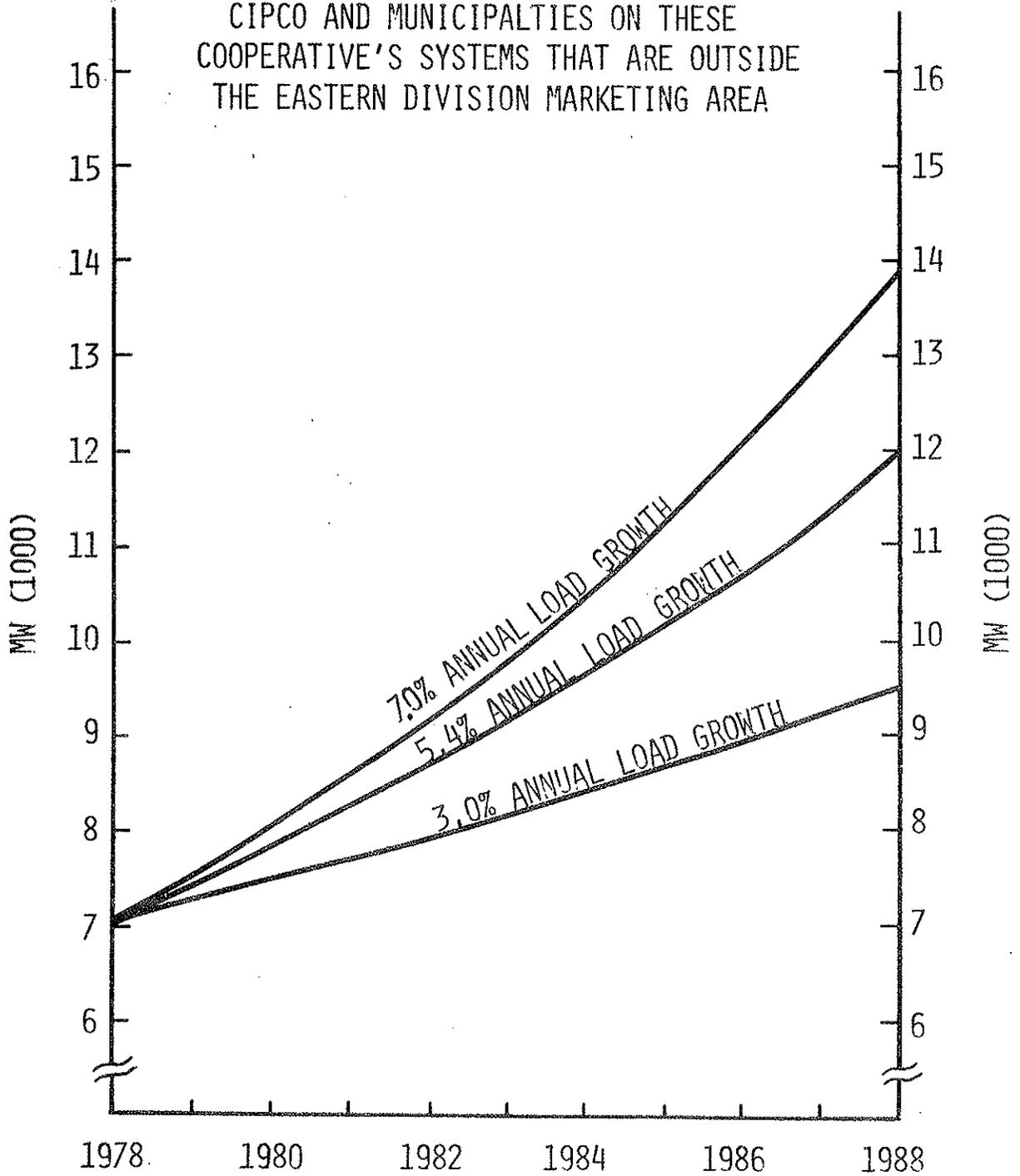
TOTAL LOAD OF EXISTING
INSIDE MARKET AREA
CUSTOMERS



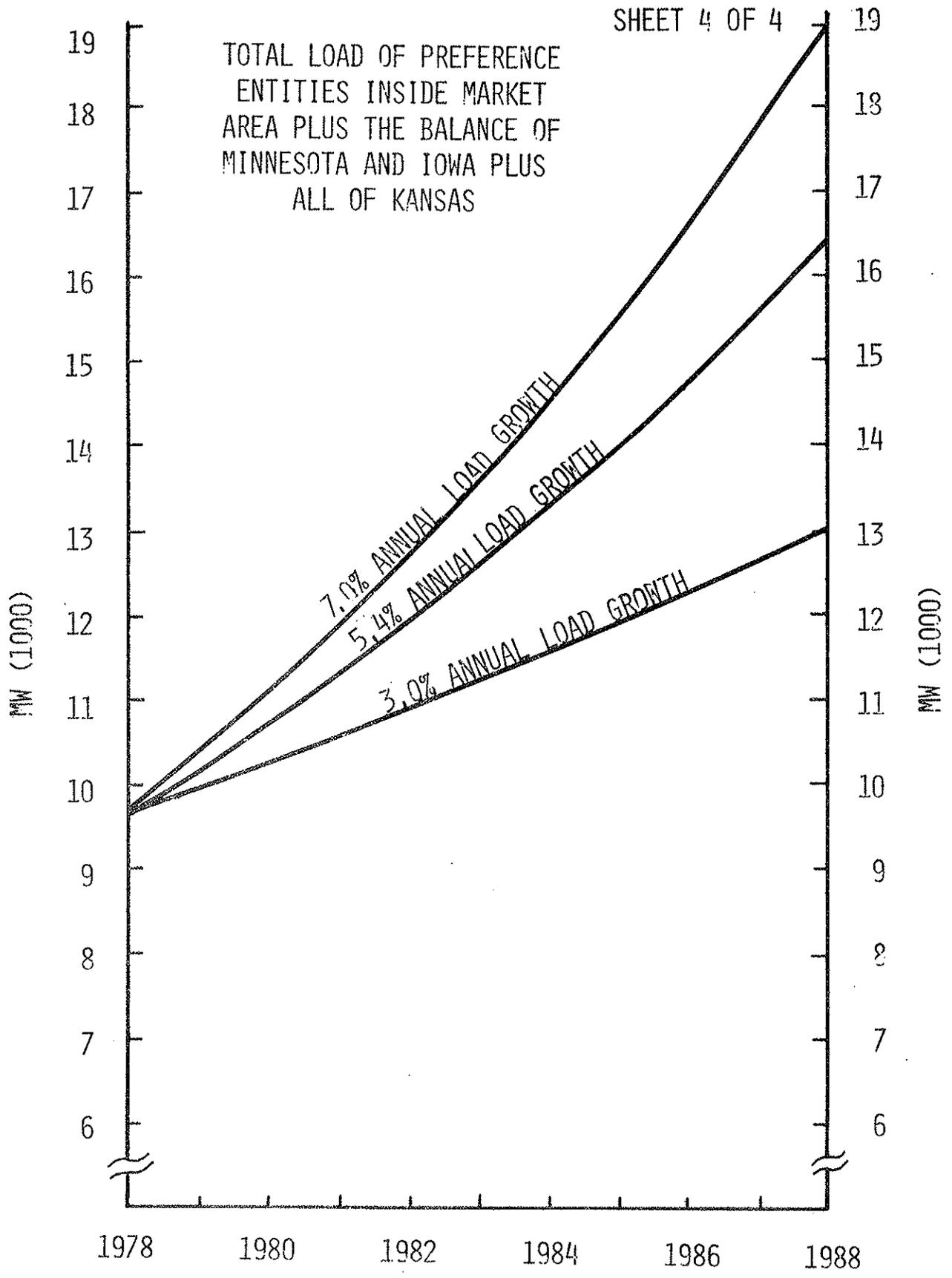
TOTAL LOAD OF ALL
PREFERENCE ENTITIES INSIDE
THE MARKET AREA



TOTAL LOAD OF PREFERENCE ENTITIES
INSIDE MARKET AREA PLUS BALANCE
OF LOADS OF MKA, CPA, UPA, CORN BELT,
CIPCO AND MUNICIPALITIES ON THESE
COOPERATIVE'S SYSTEMS THAT ARE OUTSIDE
THE EASTERN DIVISION MARKETING AREA



SUMMER SEASONS



OPTION PAPER II

POST-1985 MARKETING PLAN
EASTERN DIVISION, PICK-SLOAN MISSOURI BASIN PROGRAM

SUBJECT: TIME PERIOD FOR FUTURE COMMITMENTS. (MOST EXISTING COMMITMENTS TERMINATE IN 1985. OTHERS TERMINATE BETWEEN 1985 AND 1990.)

OPTIONS:

1. CONSIDER THE PERIOD 1986-1995.
 - A. ALLOW EXISTING COMMITMENTS TO TERMINATE IN ACCORDANCE WITH CONTRACT TERMS (1985-1990; MOST IN 1985).
 - B. MAKE NEW COMMITMENTS IN 1980 FOR THE PERIOD 1986-1995 BASED ON FIRM RESOURCES AVAILABLE IN 1995. ALLOW EXISTING COMMITMENTS NOT TERMINATED IN 1985 TO REMAIN IN EFFECT DURING THE 1985-1995 PERIOD UNTIL THEY TERMINATE.
2. EXTEND ALL EXISTING COMMITMENTS THROUGH DECEMBER 1990. CONSIDER THE PERIOD AFTER 1990 LATER.
3. CONSIDER THE PERIOD 1986-2000.
 - A. EXTEND ALL EXISTING COMMITMENTS THROUGH DECEMBER 1990.
 - B. MAKE NEW COMMITMENTS IN 1980/1981 FOR THE PERIOD 1991-2000 BASED ON FIRM RESOURCES AVAILABLE IN 2000.

OPTION PAPER II (CONT.)

PROPOSAL: ADOPT OPTION 3. -- CONSIDER THE PERIOD 1986-2000.

STEP A- EXTEND ALL EXISTING COMMITMENTS THROUGH DECEMBER 1990,
AND STEP B- MAKE NEW COMMITMENTS IN 1980/1981 FOR THE PERIOD
1991-2000 BASED ON FIRM RESOURCES AVAILABLE IN 2000.

IN MAKING THE ABOVE PROPOSAL, WESTERN ALSO PROPOSES THAT ANNUAL COMMITMENTS WILL BE CHANGED TO SEASONAL COMMITMENTS BY JANUARY 1991. THIS WOULD AFFECT ABOUT 80 CUSTOMERS WHO PRESENTLY HAVE ANNUAL COMMITMENTS. SUCH CUSTOMERS WOULD RECEIVE THE SAME COMMITMENT FOR THEIR PEAK SEASON AS THEY WOULD HAVE RECEIVED FOR THE YEAR. THE COMMITMENT FOR THE OFFPEAK SEASON WOULD BE BASED ON THE INDIVIDUAL CUSTOMER'S LOAD PATTERN. WE SUGGEST PATTERNS BE BASED ON 1976-1979 HISTORICAL DATA.

ALSO, IN MAKING NEW COMMITMENTS, WESTERN WILL REQUIRE THAT CUSTOMERS DEVELOP AN ACCEPTABLE CONSERVATION PROGRAM. THIS ITEM IS DISCUSSED IN MORE DETAIL IN A SEPARATE SECTION OF THIS REPORT.

REASONS:

1. BECAUSE EXISTING COMMITMENTS TO THE SEVERAL PRESENT CUSTOMERS TERMINATE AT VARIOUS TIMES DURING THE PERIOD 1985-1990, IT WOULD BE DESIRABLE TO EXTEND EXISTING COMMITMENTS TO A COMMON DATE PRIOR TO CONSIDERING NEW COMMITMENTS.
2. NEW ESTIMATES OF 1990 RESOURCES INDICATE EXISTING COMMITMENTS CAN BE EXTENDED THROUGH 1990 WITHOUT INORDINATE RISKS.
3. CUSTOMER PLANNING FOR FUTURE POWER SUPPLIES REQUIRES A KNOWLEDGE OF WESTERN SERVICE FOR A PERIOD LONGER THAN 5 YEARS. THIS MAKES IT NECESSARY TO CONSIDER COMMITMENTS AFTER 1990 AT THIS TIME. THE NEED FOR LEAD TIME IN POWER SUPPLY PLANNING WAS PARAMOUNT IN MAKING THIS PROPOSAL.

COMMENTS RECEIVED: OF THOSE WHO COMMENTED ON THIS SUBJECT, 70 PERCENT RECOMMENDED THAT WE CONSIDER THE PERIOD 1986-2000 (OPTION 3), 22 PERCENT RECOMMENDED THAT WE EXTEND ALL COMMITMENTS THROUGH DECEMBER 1990 AND CONSIDER THE PERIOD AFTER 1990 LATER (OPTION 2), AND 8 PERCENT RECOMMENDED THAT WE CONSIDER THE PERIOD 1986-1995 (OPTION 1). IT APPEARED FROM THE LETTERS THAT SEVERAL OF THOSE RECOMMENDING OPTION 2 WANTED TO PROCEED WITH POST-1990 PLANNING QUICKLY. SOME WANTED TO CONSIDER SPECIAL OPERATING PROVISIONS THAT COULD BEST BE HANDLED ON A BILATERAL BASIS.

OPTION PAPER III
POST-1985 MARKETING PLAN
EASTERN DIVISION, PICK-SLOAN MISSOURI BASIN PROGRAM

SUBJECT: CUSTOMERS -- WHO SHOULD RECEIVE NEW COMMITMENTS FROM EXISTING RESOURCES?

OPTIONS:

1. COMMIT FIRM RESOURCES TO EXISTING CUSTOMERS ONLY, IN THE SAME PROPORTION AS PRESENT COMMITMENTS.
2. CONSIDER NEW CUSTOMERS WHO MET THE CRITERIA FOR PREFERENCE ENTITIES AS OF JANUARY 1, 1979.
 - A. SERVE NEW CUSTOMERS WITH ADDITIONAL CAPACITY DEEMED AVAILABLE FROM NEW ADVERSE CRITERIA. NO REDUCTION OF CAPACITY TO EXISTING CUSTOMERS IN EARLY YEARS.
 - B. SERVE NEW CUSTOMERS AT LEVELS OF THE 1964 FIRM POWER ALLOCATION (ESTIMATED TO BE 47-57 MW). WOULD REQUIRE A SLIGHT (1-2 PERCENT) REDUCTION IN COMMITMENTS TO EXISTING CUSTOMERS.
 - C. DEFINITION OF NEW CUSTOMERS.
 - (1) MEET CRITERIA FOR PREFERENCE ENTITIES AS OF JANUARY 1, 1979.
 - (2) LOCATED WITHIN MARKETING AREA DETERMINED UNDER OPTION PAPER I.
 - (3) DO NOT RECEIVE FIRM FEDERAL HYDROPOWER AT THIS TIME FOR ANY OF SEVERAL REASONS.

OPTION PAPER III (CONT.)

(4) ARE NOT MEMBERS OF A PARENT ORGANIZATION WHO HAS A FIRM POWER CONTRACT.

3. CONSIDER SMALL ADJUSTMENTS TO COMMITMENTS TO EXISTING CUSTOMERS BECAUSE OF PAST INEQUITIES (2-4.4 MW).

PROPOSAL: ADOPT OPTION 2A WITH DEFINITION SET FORTH IN 2C.

IN ADOPTING OPTION 2A, WESTERN PROPOSES THAT NEW POTENTIAL CUSTOMERS WHO MEET THE CRITERIA SET FORTH WILL RECEIVE COMMITMENTS ON AN EQUITABLE BASIS, EXCEPT THAT THE MAXIMUM AMOUNT ASSIGNED TO ANY ENTITY SHALL NOT EXCEED 5,000 KILOWATTS. IT IS FURTHER UNDERSTOOD THAT PROVISIONS FOR WITHDRAWAL BECAUSE OF DEPLETIONS WILL BE REQUIRED.

REASONS: THERE ARE 37 PREFERENCE ENTITIES IN THE MARKETING AREA (OPTION PAPER I) WHO DO NOT RECEIVE FEDERAL HYDROPOWER AT THIS TIME FOR ANY OF SEVERAL REASONS AND WHO HAVE REQUESTED WESTERN POWER BY LETTER DURING THE PERIOD 1965-1979. SUCH REQUESTS HAVE BEEN REFUSED BECAUSE NO LONG-TERM FIRM POWER WAS AVAILABLE. THE NEW CRITERIA FOR ADVERSE-CAPABILITY WILL PROVIDE ABOUT 33,000 KILOWATTS IN THE SUMMER SEASON AND ABOUT 40,000 KILOWATTS IN THE WINTER SEASON. MOST OF THE REFERENCED 37 PREFERENCE ENTITIES ARE SMALL UTILITIES, AND AN EQUITABLE SHARE OF 33-40MW WOULD CONSTITUTE A SIGNIFICANT AMOUNT OF HYDROPOWER FOR THEM. HOWEVER, IT IS PROBABLE THAT MORE PREFERENCE ENTITIES WOULD APPLY THAN HAVE APPLIED IN THE PAST. ANY LARGE UTILITY MIGHT RECEIVE A LARGE SHARE OF THE SMALL AMOUNT OF POWER AVAILABLE UNDER AN EQUITABLE ASSIGNMENT. THIS COULD RESULT IN NO ENTITY RECEIVING A SIGNIFICANT SUPPLY. THEREFORE, WE PROPOSE THAT NO SUCH ENTITY RECEIVE MORE THAN 5,000 KILOWATTS.

COMMENTS RECEIVED: OF THOSE PARTIES COMMENTING ON THIS SUBJECT, 45 PERCENT SUGGESTED OPTION 2. A GREAT MAJORITY OF THESE PARTIES SUGGESTED 2A. ON THE OTHER HAND, 44 PERCENT SUGGESTED WE COMMIT FIRM RESOURCES TO EXISTING CUSTOMERS ONLY (OPTION 1), AND 11 PERCENT SUGGESTED WE CONSIDER ONLY SPECIAL HARDSHIP CASES AND PAST INEQUITIES FOR INCREASED COMMITMENT (OPTION 3).

OPTION PAPER IV

POST-1985 MARKETING PLAN
EASTERN DIVISION, PICK-SLOAN MISSOURI BASIN PROGRAM

SUBJECT: MARKETING EXISTING RESOURCES.

OPTIONS:

1. MARKET FIRM POWER WITH ENERGY.
 - A. MARKET AT SYSTEM LOAD FACTOR (PRESENT PRACTICE). PURCHASE ENERGY NOT AVAILABLE FROM HYDRO SYSTEM.
 - B. MARKET AT LOAD FACTOR THE HYDRO SYSTEM WILL SUPPORT UNDER AVERAGE WATER CONDITIONS. (APPROXIMATELY 60 PERCENT MONTHLY LOAD FACTOR.)
 - C. LIMIT LOAD FACTORS TO ENERGY USE THAT WILL ALLOW FOR ASSURED PURCHASES OF ENERGY UNDER AVERAGE WATER CONDITIONS AT OFFPEAK PRICES. HOLD POTENTIAL PURCHASES TO A REASONABLE LEVEL.
 - D. OPTION 1A WILL REQUIRE ADJUSTMENT OF THE TIP-UP PORTION OF THE ENERGY CHARGE UNDER FIRM RATE SCHEDULES. OPTION 1C MIGHT REQUIRE SUCH ADJUSTMENT, DEPENDING ON THE ENERGY USE ALLOWED.
 - E. LIMIT ENERGY USE TO AMOUNTS LESS THAN CAN BE SUPPORTED BY THE HYDRO SYSTEM. USE RESULTANT SURPLUS ENERGY FOR PURPOSES OTHER THAN LOAD-FACTOR POWER SUCH AS OPTION 2B AND OPTION 3.

OPTION PAPER IV (CONT.)

2. MARKET FIRM PEAKING POWER.
 - A. PEAKING POWER WITH NO ENERGY.
 - B. PEAKING POWER WITH SMALL AMOUNTS OF ENERGY.
 - C. PEAKING POWER ON STRICT PATTERN.
 - D. PEAKING POWER ON PREDETERMINED SCHEDULE.
 - E. COMBINATIONS.

3. COMBINATIONS OF FIRM AND FIRM PEAKING POWER.

PROPOSAL: WESTERN PROPOSES TO MARKET FIRM POWER WITH ENERGY AT SYSTEM LOAD FACTOR FOR AS LONG AS PRACTICAL WITH THE RIGHT TO LIMIT LOAD FACTORS BY GIVING 3-YEARS WRITTEN NOTICE. THIS IS A COMBINATION OF OPTIONS 1A AND 1C.

WESTERN FURTHER PROPOSES TO MARKET PEAKING POWER IN THE SAME MANNER AS IT DOES NOW (OPTIONS 2A AND 2C).

(OPTION IV CONT)

OUR STUDIES INDICATE THAT UNDER 1990 DEPLETION LEVELS EASTERN DIVISION SYSTEM AVERAGE MONTHLY LOAD FACTORS OF 75 PERCENT OR HIGHER IN THE WINTER SEASON WOULD FORCE PURCHASES OF ENERGY OUTSIDE THE LOW 8-HOUR OFFPEAK PERIOD UNDER MEDIAN WATER CONDITIONS. THIS WOULD CAUSE A SIGNIFICANT INCREASE IN THE COST OF PURCHASED ENERGY. THE SAME THING WOULD HAPPEN AT 70 PERCENT LOAD FACTOR IN LATER YEARS.

WE THEREFORE PROPOSE THAT NEW COMMITMENTS OF FIRM POWER WITH ENERGY WILL INCLUDE THE RIGHT FOR WESTERN TO LIMIT MONTHLY LOAD FACTORS (BY SEASONS) TO 75 PERCENT DURING THE PERIOD 1985-1990 AND TO 70 PERCENT DURING THE PERIOD 1991-2000, AFTER WE GIVE 3-YEAR NOTICE OF SUCH ACTION. IT IS POSSIBLE THAT ONLY SERVICE DURING THE WINTER SEASON WOULD REQUIRE LIMITATION OF ENERGY USE.

REASONS: THE BASIC REASON FOR OUR PROPOSAL FOR MARKETING FIRM POWER WITH ENERGY IS THAT LOAD FACTORS ARE GROWING AND WESTERN'S ENERGY SUPPLY WILL DECREASE WITH INCREASED WATER DEPLETIONS. THESE FACTORS COULD INCREASE THE COSTS OF PURCHASED ENERGY SIGNIFICANTLY. THIS COULD MEAN THAT CUSTOMERS WITH MODERATE LOAD FACTORS (60 PERCENT TO 70 PERCENT) WOULD SUBSIDIZE CUSTOMERS WITH HIGH LOAD FACTORS (70 PERCENT TO 100 PERCENT).

THE BASIC REASON FOR OUR PROPOSAL FOR MARKETING FIRM PEAKING POWER IS THAT OUR PRESENT PRACTICES HAVE BEEN SATISFACTORY AND WE HAVE NOT RECEIVED ANY SERIOUS OBJECTIONS. THE EASTERN DIVISION HAS ONLY 3 LONG-TERM FIRM PEAKING POWER CUSTOMERS. ANY SPECIAL PROBLEMS COULD BEST BE HANDLED ON A BILATERAL BASIS.

COMMENTS RECEIVED: OF THOSE PARTIES COMMENTING ON THE SALE OF FIRM POWER WITH ENERGY, 63 PERCENT SUGGESTED WE MARKET FIRM POWER AT SYSTEM LOAD FACTOR (1A), 19 PERCENT SUGGESTED WE LIMIT LOAD FACTORS TO ENERGY USE THAT WOULD ALLOW FOR PURCHASES AT OFFPEAK PRICES (1C), 13 PERCENT SUGGESTED WE LIMIT LOAD FACTORS TO 50 PERCENT AND USE RESULTANT SURPLUS ENERGY FOR OTHER PURPOSES (1E), AND 5 PERCENT SUGGESTED WE LIMIT LOAD FACTORS THE HYDRO SYSTEM WOULD SUPPORT (1B). A MAJORITY OF THOSE SUGGESTING OPTION 1A DID SAY TO THE EXTENT PRACTICAL OR POSSIBLE. WE BELIEVE OUR PROPOSAL IS IN CLOSE ACCORD WITH THE INTENT OF SUCH COMMENTS.

ONE CUSTOMER MADE A VERY INTERESTING PROPOSAL. IT WAS TO MARKET ENERGY AT SYSTEM LOAD FACTOR (UP TO 100 PERCENT) AND PURCHASE REQUIRED ENERGY AND ESTABLISH SEVERAL LEVELS OF TIP UP RATES -- SAY ONE FOR EACH 10 PERCENT OF LOAD FACTOR IN EXCESS OF 60 PERCENT. WE CAN SEE THE MERIT IN THIS SUGGESTION. IT WAS REJECTED BECAUSE IT WOULD REQUIRE THAT WE KEEP A RECORD OF PURCHASED ENERGY COSTS BY HOURS AND IT WOULD PROBABLY REQUIRE VERY FREQUENT RATE ADJUSTMENTS.

A LARGE MAJORITY OF THOSE PARTIES COMMENTING ON THE SALE OF FIRM PEAKING POWER SUGGESTED OPTION 2A. ONLY 13 CUSTOMERS COMMENTED ON THIS ITEM.

OPTION PAPER V

SUBJECT: MARKETING FUTURE RESOURCES.

OPTIONS:

1. MARKET EACH NEW RESOURCE SEPARATELY AS THE PRODUCT AVAILABLE.
2. MARKET NEW RESOURCES AS COMBINED PRODUCTS.
3. MARKET NEW RESOURCES IN COMBINATION WITH EXISTING RESOURCES.

PROPOSAL: WESTERN PROPOSES THAT IT STUDY EACH NEW RESOURCE AT THE TIME IT IS AUTHORIZED AND DETERMINE THE BEST METHOD OF MARKETING THE POWER WITH ADVISE FROM POTENTIAL CUSTOMERS

REASONS: NO NEW RESOURCES ARE AUTHORIZED AT THIS TIME. ONCE A PROJECT IS AUTHORIZED, THERE WOULD BE FROM 5 TO 10 YEARS TO PREPARE A MARKETING PLAN.

COMMENTS RECEIVED: OF THE PARTIES COMMENTING ON THIS SUBJECT, 59 PERCENT SUGGESTED OPTION 1, 23 PERCENT SUGGESTED OPTION 2, AND 18 PERCENT SUGGESTED OPTION 3. ONLY 22 ENTITIES COMMENTED ON THIS SUBJECT. ALTHOUGH WESTERN LEANS TOWARD OPTION 1 OR OPTION 2, IT WOULD BE RELATIVELY SIMPLE TO COMBINE NEW RESOURCES WITH EXISTING COMMITMENTS FOR THOSE CUSTOMERS DESIRING SUCH ARRANGEMENTS.

SUMMARY-MARKETING PROPOSALS

1. LEAVE MARKETING AREA THE SAME AS THE PRESENT AREA FOR MARKETING EXISTING RESOURCES FROM EXISTING FACILITIES.
2. EXTEND THE MARKETING AREA TO INCLUDE ALL OR PARTS OF THE MISSOURI BASIN STATES OF MONTANA, NORTH DAKOTA, SOUTH DAKOTA, MINNESOTA, IOWA, NEBRASKA AND KANSAS FOR MARKETING NEW RESOURCES FROM NEW FACILITIES. CONSIDER SUCH MARKETING ON A CASE-BY-CASE BASIS.
3. CONSIDER THE PERIOD 1986-2000 FOR POST-1985 MARKETING.
 - A. ANNUAL COMMITMENTS WILL BE SEASONALIZED AFTER DECEMBER 31, 1990.
 - B. CUSTOMERS RECEIVING EXTENDED OR NEW COMMITMENTS WILL BE REQUIRED TO ADOPT ENERGY CONSERVATION PROGRAMS.
 - C. A PORTION OF COMMITMENTS MAY BE WITHDRAWN ON 5-YEARS NOTICE IF REQUIRED BECAUSE OF NEW DEPLETION LEVELS OR NEW PROJECT PUMPING REQUIREMENTS.
 - D. COMMITMENTS WOULD BE MADE IN 2 STEPS--AN EXTENSION UNTIL DECEMBER 31, 1990, AND NEW COMMITMENTS FOR THE PERIOD 1991-2000.
4. COMMIT FIRM RESOURCES FIRST TO EXISTING CUSTOMERS IN THE SAME PROPORTION AS PRESENT COMMITMENTS. COMMIT ADDITIONAL CAPACITY DEEMED TO BE AVAILABLE FROM ADOPTION OF NEW ADVERSE-YEAR CRITERIA TO PREFERENCE ENTITIES WITHIN THE MARKETING AREA ON AN EQUITABLE BASIS, EXCEPT THAT NO SUCH ENTITY SHALL RECEIVE MORE THAN 5,000 KILOWATTS. SUCH ENTITIES ARE DEFINED IN OPTION PAPER III.
5.
 - A. MARKET FIRM POWER WITH ENERGY AT SYSTEM LOAD FACTOR FOR AS LONG AS PRACTICAL. WHEN NECESSARY, LIMIT ENERGY USE TO 75 PERCENT MONTHLY LOAD FACTORS BY 1990 AND TO 70 PERCENT MONTHLY LOAD FACTORS DURING THE PERIOD 1991-2000 BY GIVING 3 YEARS WRITTEN NOTICE OF SUCH LIMITATION.
 - B. MARKET FIRM PEAKING POWER IN THE SAME MANNER AS EMPLOYED AT THIS TIME.
- 6 DETERMINE HOW NEW RESOURCES WILL BE MARKETED AT SUCH TIME AS THEY ARE AUTHORIZED.

PROPOSED CONSERVATION PROGRAM

ENERGY CONSERVATION AND DEVELOPMENT OF RENEWABLE RESOURCES ARE TWO OF THE DEPARTMENT OF ENERGY'S MAJOR RESPONSIBILITIES. THE OVERALL OBJECTIVES OF THESE EFFORTS ARE TO REDUCE ENERGY CONSUMPTION AND FOREIGN OIL IMPORTS IN ACCORDANCE WITH OUR NATIONAL ENERGY GOALS. IN SUPPORT OF THESE OBJECTIVES, THE WESTERN AREA POWER ADMINISTRATION (WESTERN) AND ITS CUSTOMERS HAVE AN OBLIGATION TO FOSTER ENERGY CONSERVATION AND TO DEVELOP RENEWABLE RESOURCES WITHIN THEIR AREA OF ACTIVITY.

FOR THE PURPOSE OF THIS STATEMENT, THE TERM "CONSERVATION PROGRAM" MEANS ANY PROGRAM OR ACTIVITY CARRIED OUT BY A CUSTOMER WHICH IS INTENDED TO REDUCE ENERGY CONSUMPTION, INCREASE EFFICIENCY OF ENERGY USE OR INCREASE THE USE OF RENEWABLE RESOURCES. THE TERM "CUSTOMER" MEANS ANY ENTITY WITH A FIRM FEDERAL POWER CONTRACT AND ANY DISTRIBUTION-TYPE ENTITY RECEIVING FIRM POWER.

IN DEVELOPING ITS CONSERVATION PROGRAM, WESTERN HAS EXAMINED AND CONSIDERED A NUMBER OF APPROACHES, INCLUDING THE USE OF PRICING AS A DISINCENTIVE. BECAUSE OF THE UNIQUE NEEDS OF RURAL AMERICA AND THE EXISTENCE OF A STRONG CONSERVATION ETHIC AMONG OUR CUSTOMERS, AND BECAUSE OF THE UNDERLYING POLICIES WHICH LED TO THE RECLAMATION AND FEDERAL POWER MARKETING PROGRAMS, THE IDEA OF USING PRICING TO DISCOURAGE ENERGY CONSUMPTION HAS BEEN REJECTED.

AFTER CAREFUL CONSIDERATION OF ALTERNATIVES, WESTERN HAS DECIDED THAT THE MOST EFFECTIVE APPROACH FOR ITS PROGRAM DEVELOPMENT WOULD BE ONE WHICH RECOGNIZES THE DIFFERENT NEEDS AND ABILITIES OF EACH OF OUR CUSTOMERS, ACKNOWLEDGES CURRENT ACCOMPLISHMENTS IN THE AREA OF CONSERVATION, PROVIDES REWARDS AS WELL AS PENALTIES, AND INVOLVES A COOPERATIVE EFFORT IN PREPARING AND IMPLEMENTING A SPECIFIC PROGRAM FOR EACH CUSTOMER.

WHEN MAKING EXTENSIONS OF CONTRACTUAL COMMITMENTS, WESTERN WILL REQUIRE THAT EACH OF ITS FIRM POWER CUSTOMERS DEVELOPS AN ENERGY CONSERVATION PROGRAM. BECAUSE SITUATIONS VARY FROM CUSTOMER TO CUSTOMER AND CONDITIONS VARY FROM AREA TO AREA, EACH CUSTOMER WILL BE REQUIRED TO PREPARE AND IMPLEMENT A REASONABLE PROGRAM OF ITS OWN UNDER THE BROAD GUIDELINES AND CRITERIA PROVIDED BY WESTERN. WESTERN REPRESENTATIVES WILL BE AVAILABLE TO WORK WITH CUSTOMERS TO HELP PREPARE THEIR CONSERVATION PROGRAM.

WESTERN PROPOSES THE FOLLOWING ELEMENTS TO ACHIEVE THIS CONSERVATION OBJECTIVE:

1. CONTRACT ACTIONS COMMITTING POWER AND ENERGY FOR THE PERIOD 1985-1990 AND FOR THE PERIOD 1991-2000 WILL REQUIRE THAT CUSTOMERS PREPARE AND IMPLEMENT A CONSERVATION PROGRAM.
2. BROAD GUIDELINES AND CRITERIA FOR SUCH PROGRAMS WILL BE PREPARED BY WESTERN AND FURNISHED TO ALL CUSTOMERS NO LATER THAN JULY 31, 1981.

3. INITIAL PROGRAM SUBMITTALS MUST BE MADE TO WESTERN BY JULY 1, 1982 FOR ITS REVIEW AND APPROVAL. THERE WILL BE CONTRACTUAL PROVISIONS FOR PERIODIC UPDATE AND REVIEW OF A CUSTOMER'S PROGRAM
4. CUSTOMERS WHO IMPLEMENT AN APPROVED CONSERVATION PROGRAM WILL CONTINUE TO RECEIVE THEIR FULL COMMITMENTS OF FEDERAL POWER FROM WESTERN IN ACCORDANCE WITH THEIR CONTRACTS. CUSTOMERS WHO DO NOT HAVE AN APPROVED CONSERVATION PROGRAM, OR WHO FAIL TO IMPLEMENT THEIR PROGRAM, WILL RECEIVE A "NOTICE OF REDUCTION" THAT THEIR FIRM POWER COMMITMENTS WILL BE REDUCED AT THE END OF FOLLOWING 12 MONTHS. THIS REDUCTION WOULD PROBABLY RANGE FROM TEN (10) TO FIFTEEN (15) PERCENT OF COMMITMENTS. DURING THE TWELVE-MONTH PERIOD, CUSTOMERS WILL BE ENCOURAGED TO IMPROVE THEIR CONSERVATION PROGRAM, AND WESTERN WILL ALSO PROVIDE ASSISTANCE UPON REQUEST. IF THE REQUIRED PROGRAM IS APPROVED BY WESTERN WITHIN THE TWELVE-MONTH PERIOD, THERE WOULD BE NO REDUCTION OF COMMITMENTS.
5. CONSERVATION AND RENEWABLE RESOURCES MEASURES PLACED IN EFFECT BY CUSTOMERS PRIOR TO 1982 WILL BE FULLY CONSIDERED IN WESTERN'S REVIEW AND APPROVAL OF A CUSTOMER PROGRAM.
6. THE CUSTOMER'S RECORD IN DEVELOPMENT AND IMPLEMENTATION OF A CONSERVATION PROGRAM WILL BE CONSIDERED IN ALLOCATION OF FUTURE FEDERAL RESOURCES AND THE FUTURE MARKETING OF EXISTING RESOURCES.

WITH YOUR HELP AND SUPPORT, WESTERN FEELS THIS POSITIVE PROGRAM OF CONSERVATION CAN CONTRIBUTE SIGNIFICANTLY TO THE GOAL OF REDUCING THE NATION'S CONSUMPTION OF NON-RENEWABLE RESOURCES.

RESOURCES

Existing hydro resources include 8 Federal dams and powerplants on the Missouri River and the Big Horn River. These resources are described in some detail in the following section.

The Missouri River has an erratic flow. Inflow above Sioux City has varied from a low of 10.6 million acre-feet (MAF) in 1931 to a high of 40.6 MAF in 1978. The average flow for an 82-year period is 24.9 MAF.

Besides the varying water supply which is an unpredictable factor determined by nature, the Missouri River is subject to increasing depletions as water is taken from the river for municipal water supplies, irrigation and industrial development.

In 1979, the Upper Missouri Region of the Water and Power Resources Service (Service) completed a survey of actual 1975 depletions. At the request of Western, the Service also provided a study of depletions for the periods 1980, 1985, 1990, 1995, and 2000. The study was based on current estimates of irrigation development and municipal and industrial use. A moderate amount of industrial use was forecast, and it does not include water that would be used for a large number of synfuel developments.

These new depletion levels were furnished to the Reservoir Control Center, Missouri River Division, U. S. Corps of Engineers (Corps) in December 1979. The Corps conducted a main-stem reservoir regulation study which considered depletion levels in 1975, 1980, 1985, 1990, 1995 and 2000. A computer study, observing all project functions, determined generation for all months during the 82-year period from 1898-1979. Basic studies were completed in March 1980 and additional probability data were furnished in April 1980.

The Service provided new generation data for Canyon Ferry and Yellowtail Powerplants in May 1980.

The most pertinent results of the new generation studies are set forth on following sheets.

In 1953, prior to generation at most powerplants on the Missouri, the Missouri Basin Inter-Agency Committee studied the water supply of the Missouri River. It came to the conclusion that the 12-year drought of the 1930's (1930-1941) was an extremely rare occurrence. It had not been experienced before in recorded history of the Missouri Basin. It has not been experienced since. A statistical analysis of 75 years of precipitation records indicated the chance of recurrence of the 1930-1940 period was about one (1) chance in 3300. The committee advised that most of this period be left out of hydrological data in determining saleable hydropower. Although we are unable to determine a precise probability figure, Western concurs that recurrence of the extremely severe conditions of the 1930s drought is sufficiently remote to allow marketing of hydropower under expected better water conditions.

Prior commitments of firm capability were based on capability available in 1933, the fourth year of the 1930s drought. If one considers the whole period of record, including the whole 1930's drought, this condition could be expected to occur about 10 percent of the time (1 chance in 10). If the period 1934-1942 is eliminated from the record of flows, this water condition or better would be experienced 100 percent of the time.

In 1977, assignments of Additional Firm Power were based on the fifth and sixth year of a lower decile sequence included in the 1976-77 Annual Operating Plan (AOP). Main Stem capability used was 2057 MW in August and 1965 MW in December. These are the critical summer and winter months.

In this June 1980 report, we have proposed the use of 1961 water conditions for determining adverse-year (firm) capability for post-1985 marketing. This is the eighth year of an 8-year drought period of the 1950s. If the whole period of record is considered, this has a probability of recurrence of about 15% of the time or about 1 chance in 7. If the period 1934-1942 is deleted from the record, the probability of recurrence of 1961 conditions is about 4.1 percent or 1 chance in 25.

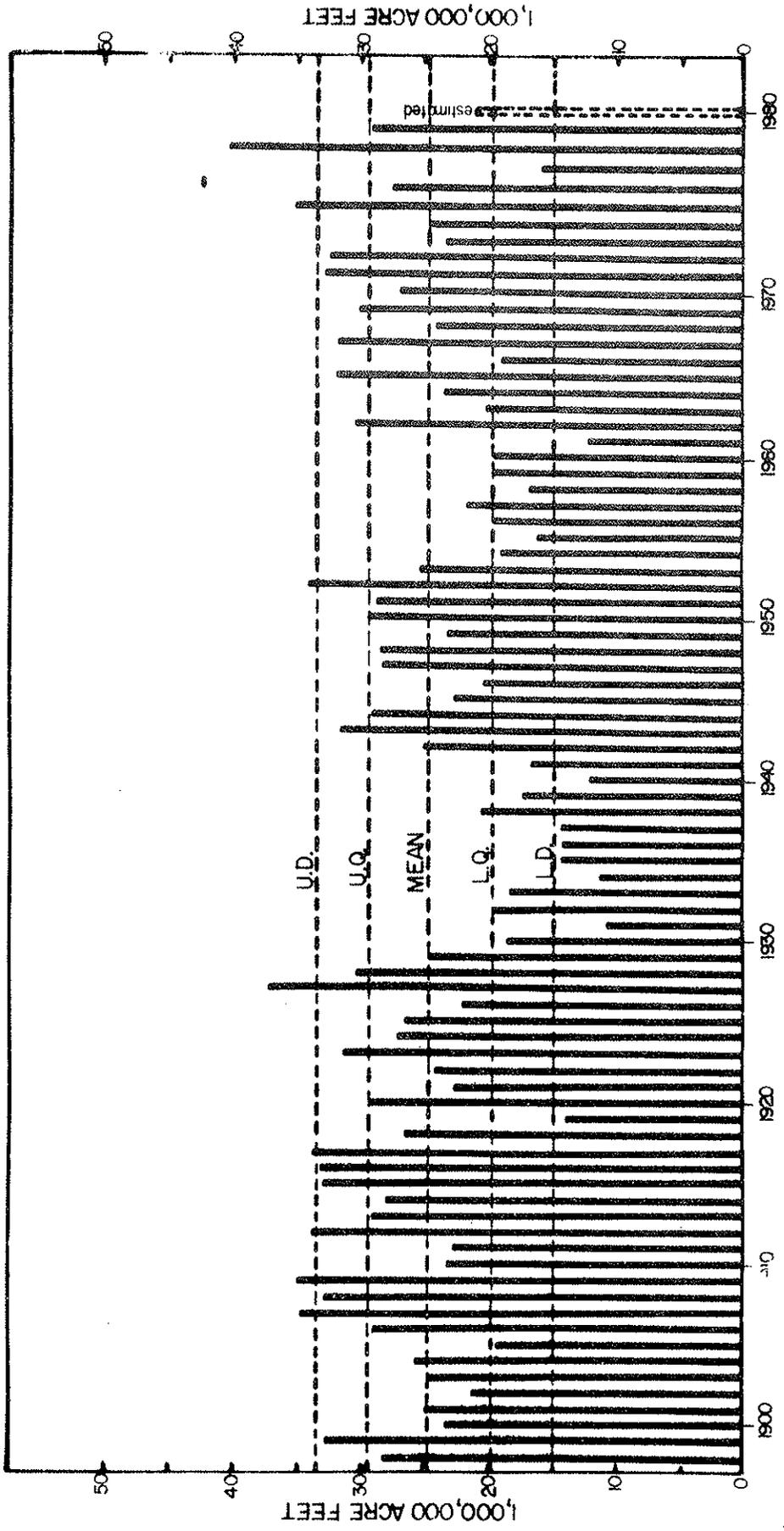
The difference in capability between 1961 and 1933 water conditions varies from 62-119 MW, depending on the level of depletions and the time of the year. In other words, if commitments are made based on 1961 conditions and 1933 conditions are experienced in the marketing period, the system could be short about 100 MW. Western believes this situation could be resolved satisfactorily if it should occur.

EXISTING RESOURCES
 (INSTALLED CAPACITY IN MW)

<u>WAPRS PLANTS</u>	<u>PLANT NAME</u>	<u>NO. OF UNITS</u>	<u>INSTALLED CAPACITY</u>
	CANYON FERRY	3	50
	YELLOWTAIL	<u>4</u>	<u>250</u>
SUBTOTAL WAPRS		7	300
<u>USCE PLANTS</u>			
	FORT PECK	5	185
	GARRISON	5	430
	OAHE	7	595
	BIG BEND	8	468
	FORT RANDALL	8	320
	GAVINS POINT	<u>3</u>	<u>100</u>
SUBTOTAL USCE		36	2098
TOTAL, EASTERN DIVISION		43	2398

APRIL, 1980

ANNUAL WATER SUPPLY MISSOURI RIVER AT SIOUX CITY



FROM U.S. CORPS OF ENGINEERS — MISSOURI RIVER DIVISION

MAIN STEM
PEAKING CAPABILITY

1898-1933, 1943-1979 (Excludes 1934-1942)

1985 DEPLETION LEVEL

<u>YEAR</u>	<u>AUG.</u> <u>(MW)</u>	<u>DEC.</u> <u>(MW)</u>	<u>FOLLOWING</u> <u>JANUARY</u> <u>(MW)</u>	<u>PERCENT OF TIME</u> ^{1/} <u>EQUALLED OR EXCEEDED</u> <u>(%)</u>
<u>1933</u>	<u>1979</u>	<u>1912</u>	<u>1929</u>	<u>100.0</u>
<u>1931</u>	<u>2057</u>	<u>1967</u>	<u>1988</u>	<u>98.6</u>
<u>1932</u>	<u>2074</u>	<u>1978</u>	<u>1993</u>	<u>97.3</u>
<u>1961</u>	<u>2077</u>	<u>1998</u>	<u>2024</u>	<u>95.9</u>
<u>1956</u>	<u>2110</u>	<u>2054</u>	<u>2067</u>	<u>94.5</u>
<u>1958</u>	<u>2133</u>	<u>2075</u>	<u>2089</u>	<u>93.2</u>
<u>1957</u>	<u>2143</u>	<u>2095</u>	<u>2104</u>	<u>91.8</u>
<u>1959</u>	<u>2138</u>	<u>2096</u>	<u>2105</u>	<u>90.4</u>
<u>1955</u>	<u>2164</u>	<u>2101</u>	<u>2112</u>	<u>89.0</u>

^{1/} Percents Based on Capabilities in December.

MAIN STEM
PEAKING CAPABILITY

1898-1979 (82 Years)

1985 DEPLETION LEVEL

<u>YEAR</u>	<u>AUG.</u> <u>(MW)</u>	<u>DEC.</u> <u>(MW)</u>	<u>FOLLOWING</u> <u>JANUARY</u> <u>(MW)</u>	<u>PERCENT OF TIME 1/</u> <u>EQUALLED OR EXCEEDED</u> <u>(%)</u>
1937	1539	1616	1616	100.0
1936	1577	1653	1651	98.8
1940	1567	1662	1664	97.6
1938	1616	1708	1716	96.3
1935	1643	1720	1720	95.1
1941	1562	1725	1724	93.9
1934	1709	1742	1743	92.7
1939	1646	1752	1755	91.5
1933	1979	1912	1929	90.2
1942	1919	1947	1958	89.0
1931	2057	1967	1988	87.8
1932	2074	1978	1993	86.6
1961	2077	1998	2024	85.4
1956	2110	2054	2067	84.1
1958	2133	2075	2089	82.9
1957	2143	2095	2104	81.7
1959	2138	2096	2105	80.5
1955	2164	2101	2112	79.3

1/ Percents Based on Capabilities in December.

SUMMARY
AT-PLANT GROSS CAPABILITY
(MEGAWATTS)

<u>DEPLETION LEVEL</u>	<u>1933 ^{1/}</u>		<u>1961 ^{2/}</u>	
	<u>AUGUST</u>	<u>DECEMBER</u>	<u>AUGUST</u>	<u>DECEMBER</u>
1980 MAINSTEM	2002	1929	2101	2026
C.F. & 1/2 YELL. ^{3/}	<u>198</u>	<u>198</u>	<u>198</u>	<u>198</u>
TOTAL	2200	2127	2299	2224
1985 MAINSTEM	1979	1912	2077	1998
C.F. & 1/2 YELL. ^{3/}	<u>198</u>	<u>198</u>	<u>198</u>	<u>198</u>
TOTAL	2177	2110	2275	2196
1990 MAINSTEM	1951	1924	2070	2011
C.F. & 1/2 YELL. ^{3/}	<u>198</u>	<u>198</u>	<u>198</u>	<u>198</u>
TOTAL	2149	2122	2268	2209
1995 MAINSTEM	1919	1920	2034	2003
C.F. & 1/2 YELL. ^{3/}	<u>198</u>	<u>198</u>	<u>198</u>	<u>198</u>
TOTAL	2117	2118	2232	2201
2000 MAINSTEM	1876	1922	1959	1984
C.F. & 1/2 YELL. ^{3/}	<u>198</u>	<u>198</u>	<u>198</u>	<u>198</u>
TOTAL	2074	2120	2157	2182

1/ 1933 WATER CONDITIONS FOR MAIN STEM PLANTS-LOWER DECILE
WATER CONDITIONS FOR CANYON FERRY AND YELLOWTAIL.

2/ 1961 WATER CONDITIONS FOR MAIN-STEM PLANTS - LOWER DECILE
WATER CONDITIONS FOR CANYON FERRY AND YELLOWTAIL.

3/ 1/2 OF YELLOWTAIL CAPABILITY SHOWN AS 140 MW.

SUMMARY
AT-PLANT GROSS ANNUAL GENERATION
 (MILLIONS OF KWH)

<u>DEPLETION LEVEL</u>	<u>APPROXIMATE MEDIAN ANNUAL GENERATION</u>
1980	
MAINSTEM	9,930
C.F. & ½ YELL.	<u> 976</u>
TOTAL	10,906
1985	
MAINSTEM	9,840
C.F. & ½ YELL.	<u> 896</u>
TOTAL	10,736
1990	
MAINSTEM	9,580
C.F. & ½ YELL.	<u> 888</u>
TOTAL	10,468
1995	
MAINSTEM	9,396
C.F. & ½ YELL.	<u> 880</u>
TOTAL	10,276
2000	
MAINSTEM	9,190
C.F. & ½ YELL.	<u> 872</u>
TOTAL	10,062

SUMMARY
AT-PLANT GROSS GENERATION
(MILLIONS OF KWH)

<u>DEPLETION LEVEL</u>	<u>APPROXIMATE MEDIAN-YEAR WATER CONDITIONS</u>			
	<u>SUMMER</u> (JUNE-SEPT)	<u>WINTER</u> (DEC-FEB)	<u>AUGUST</u>	<u>DECEMBER</u>
1980				
MAINSTEM 1/	3729.1	2183.9	1028.8	812.4
C.F. & 1/2 YELL.	<u>343.7</u>	<u>243.8</u>	<u>78.2</u>	<u>80.5</u>
TOTAL	4072.8	2427.7	1107.0	892.9
1985				
MAINSTEM 1/	3657.5	2153.5	1021.5	801.0
C.F. & 1/2 YELL.	<u>304.3</u>	<u>233.9</u>	<u>72.6</u>	<u>77.6</u>
TOTAL	3961.8	2387.4	1094.1	878.6
1990				
MAINSTEM 1/	3581.8	2101.4	995.2	780.6
C.F. & 1/2 YELL.	<u>300.4</u>	<u>232.9</u>	<u>71.8</u>	<u>77.2</u>
TOTAL	3882.2	2334.3	1067.0	857.8
1995				
MAINSTEM 1/	3488.7	2008.9	946.7	741.0
C.F. & 1/2 YELL.	<u>296.5</u>	<u>231.9</u>	<u>71.0</u>	<u>76.9</u>
TOTAL	3785.2	2240.8	1017.7	817.9
2000				
MAINSTEM 1/	3369.1	1942.6	911.6	716.9
C.F. & 1/2 YELL.	<u>292.6</u>	<u>230.9</u>	<u>70.2</u>	<u>76.6</u>
TOTAL	3661.7	2173.5	981.8	793.5

1/ 1.016 X AVERAGE GENERATION

WAPA
BOA
JUNE 1980

COMMITMENTS

A FOLLOWING SHEET SETS FORTH THE PRESENT COMMITMENTS OF THE EASTERN DIVISION.

THERE ARE 147 CUSTOMERS WHO RECEIVED A 1977 ASSIGNMENT. AT THE TIME OF THAT ASSIGNMENT, COMMITMENTS TO THESE CUSTOMERS WERE SEASONALIZED. THEY TOTAL 723 MW IN THE SUMMER AND 663 MW IN THE WINTER. THERE ARE ABOUT 80 CUSTOMERS WHO STILL HAVE ANNUAL CONTRACT RATES OF DELIVERY. THESE COMMITMENTS TOTAL 967 MW. THE CONTRACT RATE OF DELIVERY IS AVAILABLE AT THE TIME OF THE CUSTOMER'S SYSTEM PEAKS (X/Y FORMULA). THE COMMITMENT IN THE OFFPEAK SEASON IS DEPENDENT ON CUSTOMER LOAD PATTERNS WHICH FLUCTUATE. THIS GROUP OF CUSTOMERS INCLUDES BOTH WINTER AND SUMMER PEAKERS.

AT THE TIME OF THE MARCH 1979 MEETINGS, WE STATED THE SEASONALIZED COMMITMENTS TO THESE CUSTOMERS WITH ANNUAL CONTRACT RATES OF DELIVERY WERE 792 MW IN THE SUMMER AND 944 MW IN THE WINTER. THIS WAS BASED ON 1976 AND 1977 PATTERNS. IN APRIL 1980, WE DETERMINED THESE SAME COMMITMENTS TOTAL 809 MW IN THE SUMMER AND 929 MW IN THE WINTER. THE NEW FIGURES ARE BASED ON AVERAGE PATTERNS FROM 1976 THROUGH 1979. THE ONLY REASON FOR THE CHANGE WAS THE CHANGE IN CUSTOMERS' LOAD PATTERNS.

THIS POINTS UP THE PROBLEM WESTERN HAS WITH ANNUAL COMMITMENTS. IF THEY WERE TO CONTINUE IN THE POST-1985 PERIOD, IT WOULD BE NECESSARY TO RESERVE A SIGNIFICANT AMOUNT OF CAPACITY TO ALLOW FOR CHANGING SEASONAL LOAD PATTERNS. WESTERN WILL ESTABLISH SEASONAL COMMITMENTS FOR ALL CUSTOMERS FOR THE PERIOD AFTER 1990.

WAPA
BAO
APRIL 1980

COMMITMENTS
(TERMINATE 1985-1990)

<u>COMMERCIAL FIRM</u>	<u>SUMMER</u> (MW)	<u>WINTER</u> (MW)
ANNUAL COMMITMENTS	- 967	-
ANNUAL COMMITMENTS SEASONALIZED	809	929
1977 ASSIGNMENT	723	663
SUMMER FIRM	<u>75</u>	<u>-</u>
SUBTOTAL, COMMERCIAL FIRM WITH ENERGY	1,607	1,592
PEAKING (WITHOUT ENERGY)	<u>375</u>	<u>375</u>
SUBTOTAL, COMMERCIAL FIRM	1,982	1,967
<u>SPECIAL</u>		
PROJECT PUMPING ^{1/}	109	-
INTERDEPARTMENTAL	<u>-</u>	<u>1</u>
SUBTOTAL	109	1
<u>TOTAL</u>	2,091	1,968

APPROXIMATE NUMBER OF PREFERENCE CUSTOMERS = 230

^{1/} INCLUDED RESERVATIONS FOR FUTURE PROJECT PUMPING
EXPECTED TO BE ON LINE BY 1985.

WAPA
 BAO
 APRIL 1980
 SHEET 1 OF 5
 REVISED JUNE 1980

POST-1985 MARKETING
 (MEGAWATTS)

1. 1990

	<u>AUGUST</u>	<u>DECEMBER</u>
1990 DEPLETION LEVEL		
MAIN STEM (1961 COND)	2,070	2,005 ^{1/}
C.F. & 1/2 Y.T.	<u>198</u>	<u>198</u>
TOTAL	2,268	2,203
LESS PLANT USE	<u>9</u>	<u>14</u>
RESULTANT CAPABILITY	2,259	2,189
PLUS SPA HYD. DIVERSITY	<u>25</u>	<u>25</u>
EASTERN DIV. CAPABILITY	2,284	2,214
10% RESERVES	<u>208</u>	<u>201</u>
SALEABLE CAPABILITY	2,076	2,013
SCHEDULED PROJECT PUMPING	92	-
INTERDEPARTMENTAL	<u>-</u>	<u>1</u>
SUBTOTAL	92	1
CAPABILITY FOR COMMERCIAL FIRM	1,984	2,012
EXISTING COMMITMENTS FOR COMMERCIAL FIRM	<u>1,982</u>	<u>1,967</u>
AVAILABLE FOR NEW COMMITMENTS OBSERVING SCHEDULED DEPLETIONS & SCHEDULED PROJECT PUMPING	2	45

^{1/} ADJUSTED FROM 2,011 MW. HIGHER CAPABILITY CAUSED
 BY OPERATION AT FT. RANDALL

POST-1985 MARKETING
 (MEGAWATTS)

	AUGUST	DECEMBER
REDUCTION IN AUGUST MAIN STEM CAPABILITY FROM 1985-1990	7	(7)
INCREASE IN SCHEDULED PROJECT PUMPING FROM 1985-1990	50	-
SUGGESTED POSSIBLE NEW COMMITMENTS	35	40
SUMMARY:		
CAPABILITY FOR COMMERCIAL FIRM	1,984	2,012
EXISTING COMMITMENTS	1,982	1,967
PROPOSED NEW COMMITMENTS PROPOSED	<u>35</u>	<u>40</u>
PROPOSED 1990 COMMITMENTS	2,017	2,007
SURPLUS/DEFICIT	(33)	5
REQUIRED WITHDRAWAL BY GIVING 5-YEARS NOTICE	33	-
PERCENT POTENTIAL WITHDRAWAL	1.6 ^{2/}	-
INCREASE IN 1990 MAIN STEM ^{3/} CAPABILITY FROM 1933 WATER CONDITIONS TO 1961 WATER CONDITIONS	119	81

^{2/} WESTERN PROPOSES THAT ACTIONS TO EXTEND EXISTING COMMITMENTS TO DECEMBER 31, 1990, WILL INCLUDE THE RIGHT TO WITHDRAW UP TO 1.6 PERCENT OF SUMMER-SEASON COMMITMENTS BY GIVING 5 YEARS NOTICE.

^{3/} POTENTIAL EXPOSURE FROM USE OF NEW CAPABILITY CRITERIA.

POST-1985 MARKETING
 (MEGAWATTS)

2. 2000

	<u>AUGUST</u>	<u>DECEMBER</u>
2,000 DEPLETION LEVEL		
MAIN STEM (1961 COND)	1,959	2,000 ^{1/}
C.F.& 1/2 YT	<u> 198</u>	<u> 198</u>
TOTAL	2,157	2,198
LESS PLANT USE	<u> 9</u>	<u> 14</u>
RESULTANT CAPABILITY	2,148	2,184
PLUS SPA HYDR. DIVERSITY	<u> 25</u>	<u> 25</u>
EASTERN DIV. CAPABILITY	2,173	2,209
10% RESERVES	<u> 198</u>	<u> 201</u>
SALEABLE CAPABILITY	1,975	2,008
SCHEDULED PROJECT PUMPING	137	-
INTERDEPARTMENTAL	<u> -</u>	<u> 1</u>
SUBTOTAL	137	1
CAPABILITY FOR COMMERCIAL FIRM	1,838	2,007

^{1/} ADJUSTED FROM 1984 MW. ASSUMES SLIGHTLY LESS EFFECT FROM INCREASED DEPLETION.

POST-1985 MARKETING
 (MEGAWATTS)

	<u>AUGUST</u>	<u>DECEMBER</u>
CAPABILITY FOR COMMERCIAL FIRM	1,838	2,007
POSSIBLE 1990 COMMITMENTS	2,017	2,007
SURPLUS/DEFICIT BY 2000	(179)	-
REDUCTION IN AUGUST MAIN STEM CAPABILITY FROM 1990 TO 2000	111	-
REDUCTION IN AUGUST MAIN STEM CAPABILITY FROM 1995 TO 2000	75	-
INCREASE IN SCHEDULED PROJECT PUMPING FROM 1990 TO 2000	45	-
INCREASE IN SCHEDULED PROJECT PUMPING FROM 1995 TO 2000	34	-
POSSIBLE 2000 COMMITMENTS	1,838 TO 2,017	2,007
REQUIRED WITHDRAWAL BY GIVING 5-YEAR NOTICE	0 TO 179	-
SUGGESTED 2000 COMMITMENTS	1,982	2,000
INCREASE IN 2000 MAIN STEM CAPABILITY FROM 1933 WATER CONDITIONS TO 1961 WATER CONDITIONS ^{2/}	83	62

^{2/} POTENTIAL EXPOSURE FROM USE OF NEW CAPABILITY CRITERIA.

POST-1985 MARKETING
 (MEGAWATTS)

	<u>AUGUST</u>	<u>DECEMBER</u>
PROPOSED 2000 COMMITMENTS	1984	2000
CAPABILITY FOR COMMERCIAL FIRM UNDER 2000 DEPLETION AND PUMPING LEVELS	1838	2007
SURPLUS/DEFICIT BY 2000	(146)	7
REQUIRED WITHDRAWAL BY GIVING 5-YEAR NOTICE	146 ^{1/}	
PERCENT POTENTIAL WITHDRAWAL	7.359 ^{1/}	
REQUIRED REDUCTION IN COMMITMENTS FROM 1990 TO 2000	33	7

^{1/} WESTERN PROPOSES THAT COMMITMENTS MADE FOR THE PERIOD 1991-2000 WOULD BE BASED ON ESTIMATED 1990 PUMPING AND DEPLETION LEVELS AND THAT SUCH COMMITMENTS WOULD INCLUDE THE RIGHT TO WITHDRAW UP TO 7.359 PERCENT OF SUMMER-SEASON COMMITMENTS BY GIVING 5 YEARS NOTICE.

PROPOSED PROCEDURES

THE PRECEDING PAGES PRESENT WESTERN'S PROPOSALS FOR POST-1985 MARKETING FOR THE EASTERN DIVISION, PICK-SLOAN MISSOURI BASIN PROGRAM. PUBLIC COMMENT FORUMS WILL BE HELD DURING THE PERIOD AUGUST 22-AUGUST 29, 1980. IT IS PROBABLE THAT THE CUT-OFF DATE FOR COMMENTS TO BE MADE A PART OF THE RECORD WILL BE A DATE IN SEPTEMBER 1980. ALL COMMENTS WILL HAVE TO BE CONSIDERED. THE EXTENT AND VALIDITY OF COMMENTS WILL HAVE A SIGNIFICANT EFFECT ON WHEN A FINAL POST-1985 MARKETING PLAN CAN BE COMPLETED. IT IS HOPED THIS CAN BE DONE IN OCTOBER 1980.

ASSUMING THE MARKETING PLAN IS COMPLETED IN OCTOBER, WESTERN PROPOSES THE FOLLOWING PROCEDURES TO IMPLEMENT THE PLAN:

1. WESTERN WILL SEND LETTERS TO CUSTOMERS IN OCTOBER 1980 COMMITTING THE EXTENSION OF CONTRACTS THROUGH DECEMBER 31, 1990. SUCH LETTERS WILL INCLUDE THE QUALIFICATIONS MENTIONED EARLIER. THE LETTERS CAN BE IN LETTER AGREEMENT FORM.
2. WESTERN WILL SEND LETTERS TO CUSTOMERS LATER IN 1980 OFFERING COMMITMENTS FOR THE PERIOD 1991-2000. SUCH LETTERS WILL INCLUDE THE QUALIFICATIONS MENTIONED EARLIER. THE LETTERS CAN BE IN LETTER AGREEMENT FORM.
3. WESTERN WILL START ACTION ON CONTRACT SUPPLEMENTS TO EXTEND EXISTING COMMITMENTS THROUGH 1990 AS SOON AS ITEM 1 IS COMPLETED. IT IS EXPECTED THESE ACTIONS CAN BE COMPLETED IN 1980.
4. WESTERN WILL START ACTION IN 1980 ON CONTRACT SUPPLEMENTS TO COMMIT POWER AND ENERGY TO CUSTOMERS FOR THE PERIOD 1991-2000. SUCH DOCUMENTS WILL BE MORE COMPLEX THAN EXTENSION DOCUMENTS. IT IS EXPECTED THESE ACTIONS WILL NOT BE COMPLETED UNTIL EARLY IN 1981.
5. WESTERN WILL OFFER A FINITE AMOUNT OF POWER TO POTENTIAL NEW CUSTOMERS. AT THIS TIME, IT IS EXPECTED IT WILL BE 35MW IN SUMMER SEASONS AND 40MW IN WINTER SEASONS. AN EQUITABLE AMOUNT WILL BE ASSIGNED TO NEW CUSTOMERS BASED ON ACTUAL LOADS, EXCEPT NO CUSTOMER SHALL RECEIVE MORE THAN 5,000 KILOWATTS. WESTERN PROPOSES THE ASSIGNMENT BE BASED ON ACTUAL LOADS EXPERIENCED IN THE 1979 SUMMER AND THE 1979-80 WINTER. ONCE AN ASSIGNMENT OF POWER IS MADE, WESTERN WILL START CONTRACTUAL ACTION TO PUT SAID POWER AND ENERGY UNDER CONTRACT.

POTENTIAL NEW RESOURCES

A. NEW RESOURCES - NEW FACILITIES		
1. PUMPED STORAGE		
GREGORY COUNTY (S.D.) - - -		1,180 MW
WOULD GENERATE 9 HOURS EACH WEEKDAY		
(45 HOURS PER WEEK) - 27% LOAD FACTOR		
2. POSSIBLE IMPORT FOR ABOUT 17 YEARS FROM		
MANITOBA HYDRO		1,000 MW
FORT BENTON (MONTANA)		<u>360 MW*</u>
SUBTOTAL A		2,540 MW
B. NEW RESOURCES AT EXISTING FACILITIES		
1. FORT PECK PEAKING		185 MW
2. GARRISON PEAKING		<u>272 MW</u>
SUBTOTAL		457 MW
3. CANYON FERRY PEAKING		90 MW
4. YELLOWTAIL AFTERBAY (FIRM)		11 MW
5. FT. RANDALL PEAKING		<u>282 MW</u>
SUBTOTAL B		840 MW
C. TOTAL POTENTIAL NEW RESOURCES		3,380 MW

* MOSTLY PEAKING