Proceedings of the
32nd Annual Conference
Of
The Rural Electric Management Development Council

Holiday Inn
Fargo, North Dakota
May 14-17, 1989

PROCEEDINGS OF THE

32ND ANNUAL CONFERENCE

OF THE

RURAL ELECTRIC MANAGEMENT DEVELOPMENT COUNCIL

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S C O P E

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Presentations (Continued) Page

COUNCIL PREAMBLE

In March 1969 the NRECA membership adopted viewpoints and objectives for rural electrification as prepared by the Long Range Study Committee. This action has significance only when member systems identify with, and develop programs in support of, these viewpoints and objectives. Success in the implementation of such action programs is dependent upon excellent leadership and the effective management of resources, especially human resources.

NRECA, through its Management Services Department, has carried on effective training and development programs for rural electric system managements, both elected and employed, and the results of these programs are obvious in the upgrading of the quality of management in recent years. However, NRECA has limited resources for the research, experimentation, and innovations in management practices that will be required to meet the demands of a rapidly changing social order. Moreover, REA continues to withdraw its advice and assistance to borrowers.

Thus, it is clear that some systems must assume a more active role in assuring competent, dynamic management for the future. There are people within the program who are qualified and willing to see that the necessary study and research are undertaken toward this end. Such people have formed the Rural Electric Management Development Council and the following statements express their viewpoints and objectives.

STATEMENT OF VIEWPOINTS

1. We believe that the objectives of the Rural Electric Program can best be achieved through dynamic management and leadership that is based on sound cooperative philosophy coupled with modern management principles and techniques.

2. We believe that cooperative philosophy and management principles and techniques must be under constant study and review and that research and development of new concepts and approaches must be undertaken if rural electric systems are to effectively fulfill the responsibilities inherent in the objectives of the Rural Electric Program.

3. We believe that there exists within the rural electric cooperatives, and their associated organizations, the knowledge, experience and point of view necessary to identify these needs and to determine required changes.

4. We believe that there exists among rural electric cooperatives, and their associated organizations, those who are willing to innovate, study and improve present cooperative and management principles and practices and to translate the results of such studies into meaningful programs.

RURAL ELECTRIC
MANAGEMENT DEVELOPMENT COUNCIL

STATEMENT OF VIEWPOINTS (continued)

5. We believe that rural electric system management will be enhanced where there has been a maximum exchange of ideas and experiences between those organizations that are innovating, studying and applying up-to-date principles and techniques.

6. We believe that all consumer-owned rural electric systems should have the opportunity to share in the results of such innovations in management practices and that this opportunity for sharing can best be provided through NRECA and other associated organizations.

STATEMENT OF OBJECTIVES

1. To bring together key rural electric management people who have demonstrated their application of up-to-date cooperative philosophy and management principles and techniques and who evidence an interest and willingness to participate in and contribute to study, research and innovation in the application of effective management concepts and techniques in rural electric system operations.

2. To contribute to the strengthening of overall rural electric system management by undertaking management research in areas of current concern and interest.

3. To develop new cooperative management concepts, approaches and techniques that will enable the management of rural electric systems to identify necessary resources and to provide the leadership required for meeting the needs of the people in an ever changing environment.

4. To develop the means whereby the beneficial results of the application of such management research and innovation can be interpreted and widely disseminated to rural electric systems and to encourage its effective application.

RURAL ELECTRIC MANAGEMENT DEVELOPMENT COUNCIL

MEMBERSHIP REQUIREMENTS

The Rural Electric Management Development Council is established to provide a forum for those rural electric systems which have developed organizations built on the application of cooperative principles and modern management principles and techniques.

The Viewpoints and Objectives of the Council, attached hereto, identify more specifically the beliefs and purpose that all members of the Council subscribe to. The Council's primary purpose is one of research and innovation. Research and innovation which are within the parameters of the established Viewpoints and Objectives.

The Council does not intend to provide a forum for teaching basic cooperative philosophy and basic management principles and techniques. Adequate training opportunities for this are provided by NRECA and other organizations.

Thus, to assure that the limited time available for the conduct of research and the exchange and discussion of innovative ideas can be utilized to the maximum productive extent possible, it is necessary that those systems which wish to apply for membership in the Council, those which wish to sponsor systems for membership and those systems which are currently members of the Council be fully aware of the criteria for initial and continuing membership.

A. Initial Membership

Any rural electric system or association of rural electric systems may apply and be considered for membership in the Rural Electric Management Development Council.

The criteria for initial or continuing membership shall be adopted by the Council members at the Council's annual meeting. Any amendments or changes in this criteria shall be approved by the Council membership.

Representatives of NRECA, CFC, and REA, and current members of the Council will be encouraged to nominate rural electric systems or other associations that are believed to meet all of the criteria for membership.

The Membership Committee shall review all applications for membership and shall recommend those applicants who meet the established criteria. Approval for membership in the Council shall be by a majority vote of members present.

Prospective members may attend an annual meeting of the Council as non-paying guests the first year. If interested in joining the Council, the prospective member shall submit an application as prescribed in Section A.

Those applying for initial membership shall be requested to submit the following:

1. Evidence of having demonstrated their application of up-to-date cooperative philosophy and management principles and techniques. This evidence shall include the following:

   a. An Organization Profile - Documentation of the existence of an organization plan for the system. The documents required will be specified and should accompany the application.

   b. A System Profile - A recitation of the financial and operating characteristics of the system, including evidence of the existence of short and long range plans in specified areas.

   c. A Corporate Profile - An identification of programs and activities designed to involve the members and the public. Evidence of a recognition and pursuit of goals designed to enhance the consumer ownership and public responsibility of the system.

   d. A Growth and Development Profile - Evidence of specific programs and activities undertaken by the system to go beyond normal requirements for management, individual development and member involvement. This should include the identification of beneficial results therefrom.

2. A statement of a commitment to participate in and contribute to study, research and innovation in the application of management in rural electric system operations.

3. A statement of the system's willingness to pay the dues or other approved assessments of the Council, to attend and participate in Council meetings and to accept committee or program assignments.

4. An expression of willingness to share your individual management innovations with the Council for information and evaluation purposes.

B. Continuing Membership

All members of the Council shall be subject to continuing membership review at least every five years. Subject systems shall be notified at the Council's meeting preceding the review.

Applications for recertification as continuing members shall include:

1. A recap of attendance and involvement in the annual conference programs.

2. A recap of committee assignments and research activities.

3. Evidence of a continuing dedication to, and active support of, excellence in rural electric management and leadership.

The Membership Committee shall review the applications for recertification and present them to the Council for approval at the next annual meeting.

C. Honorary Membership

The following individuals, or their designated representatives, are considered as continuing honorary members of the Management Development Council. The Council encourages their active participation in all Council projects and activities.

Director of Management Services - NRECA
Borrowers' Operations Office - CFC
Director-Electric Borrower's Management Division - REA

D. Termination of Membership

Membership in the Council shall be terminated by:

1. A letter of withdrawal from a member system, or;

2. Upon investigation and recommendation by the Membership Committee, by a majority vote of the members present.

E. Council Dues

The annual dues shall be $300.00, payable prior to the annual meeting of the Council. Payment of dues shall permit the attendance of key management people from each member system.

FUNCTIONS

CHAIRMAN	To act as general coordinator of the activities of the Development Council and preside at all business meetings. To issue notice of all regular meetings of the membership or special meetings of the cabinet. (The cabinet to be composed of the chairman, vice chairman, treasurer, and all committee chairmen.) To represent the Development Council in relation to other organizations. Term of office to be three (3) years.
VICE CHAIRMAN	To assume all duties of the Chairman in the absence of or inability of that officer. Term of office to be three (3) years.

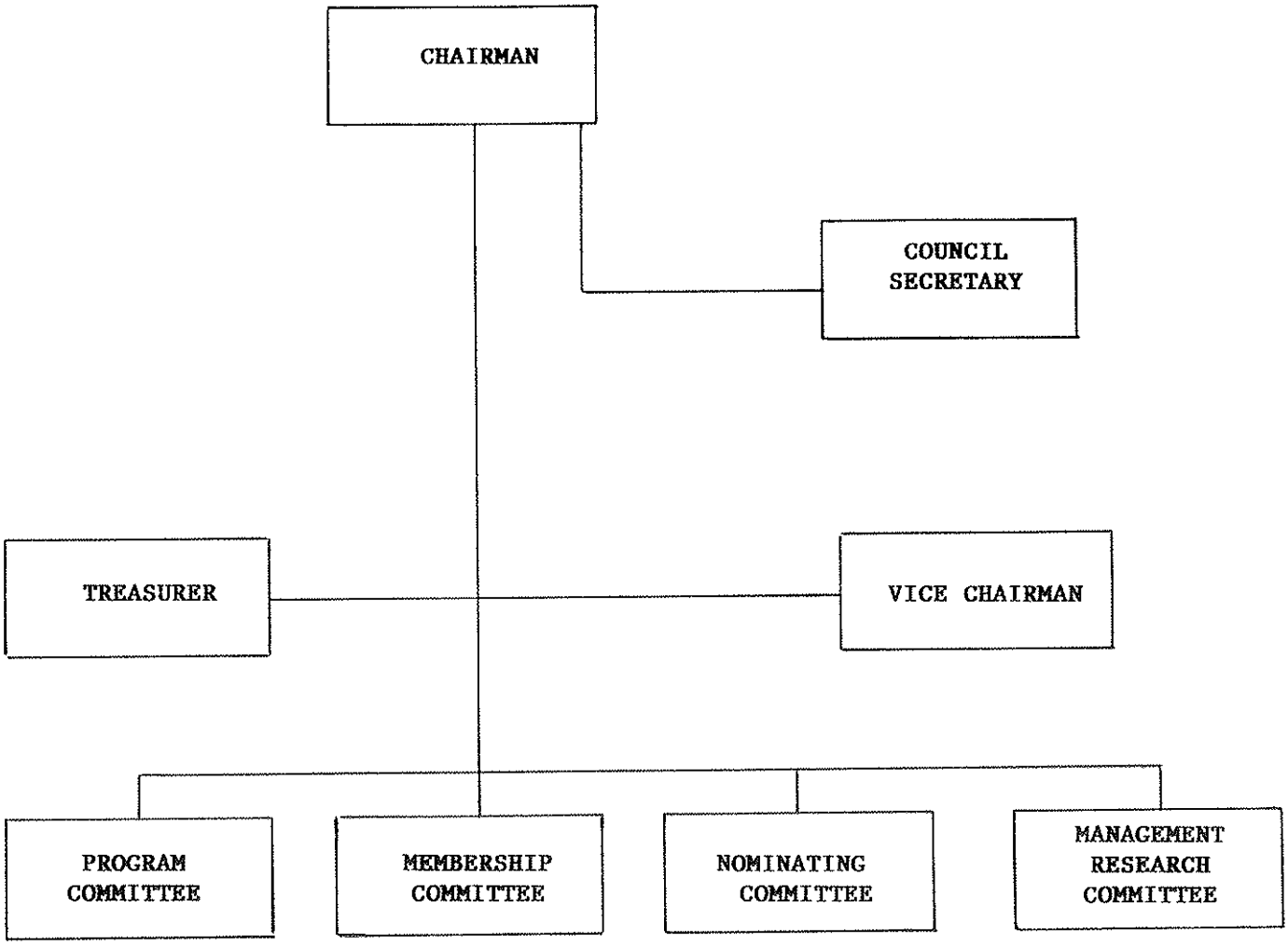
TREASURER	To collect all monies due the Development Council including regular membership dues and special assessments. To pay all bills submitted in proper form. To prepare an annual financial statement and forward to the Secretary for inclusion in the annual conference summary. Term of office to be three (3) years.
SECRETARY	To be appointed annually by the Chairman. To keep a record of all proceedings, prepare, publish, and distribute annual conference summary. (May be assisted by Management Services Department of NRECA.)

COMMITTEES

All committees to be composed of a chairman and three (3) members. The chairman to be nominated by the Nominating Committee. All committee chairmen and committee members to serve staggered terms of three (3) years each.

PROGRAM COMMITTEE	To determine program content and format for the annual conference and secure appropriate participation from the membership. To provide for subject continuity in programming when desirable. The committee chairman shall preside at all program sessions. To select the time and place for the annual council meeting.
MEMBERSHIP COMMITTEE	Under the established criteria, solicit and process applications of new members as well as administer the recertification of continuing members. Monitor the attendance and participation of member systems from year to year and recommend follow-up action as necessary to maintain a membership that is interested and active in Council affairs.
NOMINATING COMMITTEE	To nominate all officers and committee chairmen, as necessary for submission to the annual conference for election. All nominations shall be submitted in writing, certified by the chairman of the committee, and deposited with the conference secretary.
MANAGEMENT RESEARCH COMMITTEE	To identify research areas and initiate recommendations for projects to be carried out by the Council. To work with NRECA in identifying management areas in the rural electric program which need additional research and/or development and training programs and determine how the Council can assist in meeting needs in cooperation and coordination with NRECA.
COMMITTEE MEMBERS' EXPENSES	Reasonable out-of-pocket travel expenses of committee members attending committee meetings held solely for Council business, and not held in conjunction with other business meetings, shall be paid by the Council.

RURAL ELECTRIC MANAGEMENT DEVELOPMENT COUNCIL



RURAL ELECTRIC MANAGEMENT DEVELOPMENT COUNCIL
OFFICERS AND COMMITTEES FOR 1989

Officers

Chairman - Harold Smith	Term expires 1990
Vice Chairman - Wayne Johnson	Term expires 1990
Treasurer - Allen Ritchie	Term expires 1989
Secretary - Christine Beane	Appointed annually

Program Committee

Chairman - Craig DeBower	Term expires 1989
Don Kessler	Term expires 1991
Paul Bienvenue	Term expires 1989
Gary Hobson	Term expires 1989
Kim Colberg	Term expires 1990

Nominating Committee

Chairman - W. R. Fleming	Term expires 1989
Derl Hinson	Term expires 1989
Ron Knouse	Term expires 1991
Mike Gustafson	Term expires 1990

Membership Committee

Chairman - Layton Wheeler	Term expires 1990
Jean Stansell	Term expires 1991
Ev Bristol	Term expires 1991
Joe Cade (unexpired term of David Schornack)	Term expires 1989

Management Research Committee

Chairman - Wayne Johnson	Term expires 1989
Paul Weatherby	Term expires 1991
Doyle Hines	Term expires 1991
Jim Kiley	Term expires 1990
Joe Satterfield	Term expires 1990

A. All committee members and officers are electd for three-year terms except as noted.

B. Chairman of each standing committee named by the Nominating Committee and serves three years when elected, unless completing an unexpired term as a replacement.

RURAL ELECTRIC MANAGEMENT DEVELOPMENT COUNCIL
1989 ANNUAL CONFERENCE REGISTRATION

Adams Electric Cooperative, Inc.
P. O. Box 130
Gettysburg, Pennsylvania 17325
Fred J. Kane, Manager of Operations

Blue Ridge Electric Membership Corporation
Caller Service 112
Lenoir, North Carolina 28645
Ron Knouse, Vice President, Corporate Services
Christine Beane, Office Services Manager

Butler County REC
P. O. Box 98
Allison, Iowa 50602
Robert J. Bauman, General Manager

Cap Rock Electric Cooperative, Inc.
P. O. Box 700
Stanton, Texas 79782
David Pruitt, CEO & General Manager

Cass County Electric Co-op, Inc.
P. O. Box 8
Kindred, North Dakota 58051
Michael Gustafson, General Manager
Rose Ensminger, Executive Secretary
John D. Keller, Legal Counsel
Jack Delvo, Division Manager, Engineering & Operations
Lawrence Moderow, retired General Manager

Central Area Data Processing Corporation
P. O. Box 408
St. Peters, Missouri 63376
Dave Fricke, Executive Assistant to General Manager

Central Georgia Electric Membership Corporation
P. O. Box 309
Jackson, Georgia 30233
George L. Weaver, General Manager

Clark County Rural Electric Membership Corporation
609 East Utica Street
Sellersburg, Indiana 47172
Wayne Johnson, Executive Vice President
Carl Sederlund, Assistant to Executive Vice President

Cobb Electric Membership Corporation
P. O. Box 369
Marietta, Georgia 30061
Paul Weatherby, Chief Executive Officer
Tony F. Wilson, Auditor

REMDC Registration (continued)

Delaware Electric Cooperative
P. O. Box 600
Greenwood, Delaware 19950
E. Paul Bienvenue, General Manager
Layton Wheeler, Manager, Member Services
Fay P. Shockley, Manager, Personnel

Farmers Electric Co-op, Inc.
P. O. Box 310
Chillicothe, Missouri 64601
Dan Bryan, General Manager

Flint Electric Membership Corporation
P. O. Box 308
Reynolds, Georgia 21076
Harold B. Smith, General Manager

Four County Electric Power Association
P. O. Box 351
Columbus, Mississippi 39703
Marlynn Cox, Executive Assistant

Hancock-Wood Electric Co-op, Inc.
P. O. Box 188
North Baltimore, Ohio 45872
Steve Fausnaugh, Director, Administrative Services

Johnson County Electric Cooperative Association
P. O. Box 16
Cleburne, Texas 76031
Hollis E. (Gene) Joslin, Manager

Linn County REC
P. O. Box 69
Marion, Iowa 52302
Kim Colberg, General Manager
Phyllis Barber, Staff Assistant

Maquoketa Valley Rural Electric Co-op
P. O. Box 351
Anamosa, Iowa 52205
Dorothy Postel, General Manager

Northeastern REMC
P. O. Box 171
Columbia, Indiana 46725
William W. James, Jr., President and General Manager

Pioneer Rural Electric Cooperative, Inc.
P. O. Box 604
Piqua, Ohio 45356
Robert L. Roberts, General Manager

Shenandoah Valley Electric Cooperative
P. O. Box 8
Dayton, Virginia 22821
Allen R. Ritchie, Manager, Administrative Services

REMDC Registration (Continued)

Sioux Valley Empire Electric Association
P. O. Box 216
Colman, South Dakota 57017
Jim Kiley, General Manager
Elaine J. Garry, Staff Assistant

Southeast Iowa Electric Association
P. O. Box 440
Mt. Pleasant, Iowa 52641
Larry E. Hopkey, General Manager

Southern Maryland Electric Cooperative
Hughesville, Maryland 20637
Jan Penn, Senior Member Relations Advisor

William E. Smith, General Manager
Washington Electric Cooperative, Inc.
P. O. Box 8
East Montpelier, Vermont 05651

Wells Rural Electric Cooperative
P. O. Box 365
Wells, Nevada 89835
Daniel L. Kessler, Jr., General Manager

Guest Registration

Donald J. VanDeest, Manager
Central Wisconsin Electric Co-op
P. O. Box 255
Iola, Wisconsin 54995

Derl J. Henson, Executive Vice President
Georgia EMC
148 International Boulevard, S-845
Atlanta, Georgia 30043

Tom Upshaw, Manager
Palmetto Electric Co-op, Inc.
P. O. Box 1218
Hilton Head, South Carolina 29989

Roger W. Geckler, General Manager
Greg Miller, Staff Assistant
Minnesota Valley Electric Co-op
Route 1, Box 125
Jordan, Minnesota 55352

Marv Athey, General Manager
Trico Electric Co-op, Inc.
P. O. Box 35970
Tucson, Arizona 85740

Guest Registration - (continued)

Jim Hubbard, Director, Marketing & Organizational Relations
Gary Gordy, Assistant to the Governor
National Rural Utilities CFC
1115 30th Street, North West
Washington, D. C. 20007

Bob Schiller, Management Consultant
Dr. Greg Boudreaux, Manager, Board & Management Development
National Rural Electric Cooperative Association
1800 Massachusetts Avenue, NW
Washington, D. C. 20036

Carl Stover, Consulting Engineer
C. H. Guernsey & Company
Oklahoma City, Oklahoma

RURAL ELECTRIC MANAGEMENT

DEVELOPMENT COUNCIL 1989 MEMBERS

	Recertification Date
Dan Murray, General Manager Adams Electric Cooperative, Inc. P. O. Box 130 Gettysburg, Pennsylvania 17325	1993
Wayne D. Keller, Executive Vice President Blue Ridge Electric Membership Corporation Caller Service 112 Lenoir, North Carolina 28645	1993
Joe Satterfield, Manager Blue Ridge Mountain Electric Membership Corporation P. O. Box 8 Young Harris, Georgia 30582	1992
David Batten, Manager Brunswick Electric Membership Corporation P. O. Box 826 Shallotte, North Carolina 28459	1992
Robert J. Bauman, Manager Butler County REC P. O. Box 98 Allison, Iowa 50602	1993
David Pruitt, Manager Cap Rock Electric Cooperative, Inc. P. O. Box 700 Stanton, Texas 79782	1994
Michael Gustafson, General Manager Cass County Electric Co-op, Inc. P. O. Box 8 Kindred, North Dakota 58051	1993
Gary Hobson, General Manager Central Area Data Processing Corporation P. O. Box 408 St. Peters, Missouri 63376	1990
George L. Weaver, Manager Central Georgia Electric Membership Corporation P. O. Box 309 Jackson, Georgia 30233	1992
Wayne W. Johnson, Executive Vice President Clark County Rural Electric Membership Corporation 609 East Utica Street Sellersburg, Indiana 47172	1993

REMDC 1989 MEMBERS

Paul Weatherby, General Manager ✓ — 1994
Cobb Electric Membership Corporation
P. O. Box 369
Marietta, Georgia 30061

Wayne Wilkins, General Manager — 1988
Davidson Electric Membership Corporation
P. O. Box 948
Lexington, North Carolina 27292

Paul Bienvenue, General Manager ✓ — 1990
Delaware Electric Cooperative
P. O. Box 600
Greenwood, Delaware 19950

Dan Bryan, Manager ✓ — 1994
Farmers' Electric Co-op, Inc.
P. O. Box 310
Chillicothe, Missouri 64601

Harold Smith, General Manager ✓ — 1990
Flint Electric Membership Corporation
P. O. Box 308
Reynolds, Georgia 31076

Earl Weeks, General Manager ✓ — 1991
Four County Electric Power Association
P. O. Box 351
Columbus, Mississippi 39703

Edward E. Brown, Jr., General Manager — 1988
Four County Electric Membership Corporation
P. O. Box 667
Burgaw, North Carolina 28425

Doyle Hines, General Manager ✓ — 1994
Guadalupe Valley Electric Cooperative
P. O. Box 118
Gonzales, Texas 78629

John A. Cheney, General Manager ✓ — 1994
Hancock-Wood Electric Co-op, Inc.
P. O. Box 188
North Baltimore, Ohio 45872

Randall Pugh, President ✓ — 1994
Jackson EMC
P. O. Box 38
Jefferson, Georgia 30549

Hollis E. (Gene) Joslin, Manager ✓ — 1993
Johnson County Electric Co-op Assn.
P. O. Box 16
Cleburne, Texas 76031

REMDC 1989 MEMBERS

James D. Sherfey, General Manager ✓ — 1991
Lee County Electric Cooperative
P. O. Box 3455
North Ft. Myers, Florida 33903

Kim Colberg, Manager ✓ — 1994
Linn County Rural Electric Cooperative
P. O. Box 69
Marion, Iowa 52302

Ronnie Hunt, General Manager ✓ — 1990
Lumbee River Electric Membership Corporation
P. O. Box 830
Red Springs, North Carolina 28633

Dorothy Postel, General Manager — 1993
Maquoketa Valley Rural Electric Co-op.
P. O. Box 351
Anamosa, Iowa 52205

Kevin Sump, General Manager — 1993
Morgan County Rural Electric Membership Corporation
P. O. Box 1716
Martinsville, Indiana 46151

William W. James, Jr., General Manager ✓ — 1993
Northeastern REMC
P. O. Box 171
Columbia, Indiana 46725

Robert L. Roberts, Manager ✓ — 1993
Pioneer Rural Electric Cooperative, Inc.
P. O. Box 604
Piqua, Ohio 45356

Dick Fleming, General Manager — 1994
Shenandoah Valley Electric Cooperative
P. O. Box 8
Dayton, Virginia 22821

Jim Kiley, General Manager ✓ — 1993
Sioux Valley Empire Electric Association
P. O. Box 216
Colman, South Dakota 57017

Larry Hopkey, Manager ✓ — 1990
Southeast Iowa Electric Association
P. O. Box 440
Mt. Pleasant, Iowa 52641

Walter H. Smith, Executive Vice President — 1994
Southern Maryland Electric Cooperative
Hughesville, Maryland 20637

REMDC 1989 MEMBERS

John C. Anderson, Executive Vice President ✓ — 1992
Southside Electric Cooperative
P. O. Box 7
Crewe, Virginia 23939

Dave Dunnell, General Manager ✓ — 1988
Union REA, Inc.
P. O. Box 359
Brighton, Colorado 80601

William E. Smith, General Manager — 1994
Washington Electric Cooperative, Inc.
P. O. Box 8
East Montpelier, Vermont 05651

Daniel L. Kessler, Jr., General Manager ✓ — 1992
Wells Rural Electric Cooperative
P. O. Box 365
Wells, Nevada 89835

James Golden, General Manager — 1993
Yampa Valley Electric Association, Inc.
P. O. Box 1218
Steamboat Springs, Colorado 80477

COPING IN THE 90's

Monday, May 15
Harvest Hall

8:00 a.m.	Coffee and Danish	
8:30	Registration	
9:00	Welcome & Comments	Chairman, Harold Smith Flint EMC, Georgia
9:15	Program Overview	Paul Bienvenue - Delaware EC
9:30	Territorial Integrity	Mike Gustafson - Cass County, North Dakota and John Kelly, Esquire - Cass County Legal Counsel
10:15	Break	
10:30	Internal Auditing	Tony Wilson, Auditor - Cobb County EMC, Georgia
11:15	Marketing Directed Retail Rate Design	Jim Kiley - Sioux Valley Empire, South Dakota
12:00 Noon	Lunch	
1:15 p.m.	Educational Priorities The Business Industry Education Alliance	Layton Wheeler, Delaware EC
2:00	Idea Share/Shop Talk Rates/Members/Drug Free Workplace	Allen Ritchie, Manager - Administrative Services Shenandoah Valley EC, Virginia
3:00	Break	
3:15	Consumer Cost - Size ? Density ?	Bob Bauman - Butler County REC, Iowa
4:00	Adjourn	

Management is a team activity. But no matter how well a team is put together, no matter how well it is directed, the team will perform only as well as the individuals on it.

Andrew S. Grove

Tuesday, May 16

8:00 a.m.	Coffee and Danish	Harvest Hall
8:30	URD Cable Performance - An Update	Jack Delvo, Division Manager Engineering & Operations Cass County, North Dakota
9:15	NRECA Programs and Emphasis	Dr. Greg Boudreaux, Manager Board & Management Development, NRECA
10:15	Break	
10:30	CFC Update - Programs and Activities	Gary Gordy Assistant to the Governor, CFC and Jim Hubbard, Director Marketing & Organizational Relations, CFC
11:30	REMDC Today Where are we? Who are we? Why are we? How are we?	Jim Kiley - Sioux Valley Empire, South Dakota
12:00 Noon	Lunch	
1:15 p.m.	Nontraditional Ideas	Bill James, Northeastern REMC
2:00	Effective Member Contacts Welcome to Lake Tahoe	Dan Kessler, Wells REC, Nevada
2:45	Break	
3:00	Business Session Finance Report, Committee Reports, Old Business, New Business, Comments and Observations	Chairman Smith
4:00	Adjourn	

"We live in a world of change, yet we act on the basis of continuity. Change is unfamiliar, it disturbs us. We ignore it, we avoid it, often we try to resist it. Continuity, on the other hand, is familiar; it provides safety and security."

Leon Martel

Wednesday, May 17

8:00 a.m.	Coffee and Danish	Harvest Hall
8:30	How Can Rural Electrics Cope In A World Economy?	Wayne Johnson, Chairman Research Committee Clark County REMC, Indiana
	Can Cooperatives Be Competitive For New And Existing Industrial Loads?	
	How Vulnerable Are Cooperatives To Influence And Takeover?	
10:15	Break	
	Can We Provide Full Utility Responsibility For Large Industrial Loads? Multinational Companies?	
	Should Cooperatives Try To Do So If It Threatens The Principles Of Cooperatives?	
12:00 Noon	Lunch	
1:15 p.m.	What Structural Changes Do We See In The Future? • Consolidation • Shared Management • Diversification • Vertical Integration	
3:00	Break	
	Financing: Where and How?	
	The Changing Role Of REA, NRECA And CFC In A World Economy.	
4:00	Adjourn	

"Strategy is simply understanding the proper connection of means and ends."
Paul Hawken

SOUTH POINTE SERVICE HISTORY

Mike Gustafson, General Manager
Cass County Electric

September 1978	South Pointe area annexed into City of Fargo. CCEC files letter of intent to serve.
June 1981	CCEC constructs facilities in South Pointe.
August 1986	CCEC discusses South Pointe service with E. W. Wulie. NSP and E. W. Wulie sign service contract.
October 1986	CCEC files complaint with NSP. CCEC extends facilities into South Pointe. PSC schedules hearing, denies CCEC's cease and desist request. NSP extends facilities into South Pointe.
January 1987	PSC rules NSP can serve South Pointe. CCEC appeals to district court.
June 1987	District rewards case back to PSC; NSP appeals to Supreme Court.
February 1988	Supreme Court rewards case back to PSC.
November 1988	PSC reverses ruling; orders NSP to sell to CCEC.
December 1988	CCEC files complaint NSP won't sell; NSP appeals to district court.
January 1989	District court denies NSP's request for a stay on PSC order. NSP found in violation of PSC order.
February 1989	NSP sells facilities to CCEC. Appeal to district court pending.

CASS COUNTY ELECTRIC COOPERATIVE, INC.,

Appellee,

v.

NORTHERN STATES POWER COMPANY,

and

North Dakota Public Service Commission.

Civ. No. 870163.

Supreme Court of North Dakota.

Feb. 1, 1988.

Rural electric cooperative sought judicial review of the Public Service Commission's dismissal of a complaint for an order restraining and enjoining an electric utility's construction and extension of electric lines and system into a subdivision that had been annexed by a city. The District Court, Burleigh County, South Central Judicial District, Benny A. Graff, J., reversed and remanded for further consideration. Utility appealed. The Supreme Court, Erickstad, C.J., held that: (1) a rural electric cooperative may lawfully continue to provide electric service within an area, even after the area has been annexed by a city; (2) the Commission could act to prevent duplication of services, even if the cooperative was not yet providing service to actual customers within the annexed area; and (3) the Commission must look at the existing electric facilities that both entities have in place to determine whether extension of the utility's services in the subdivision would constitute an unreasonable duplication of capital-intensive facilities and services already provided by the cooperative.

Judgment affirmed and case remanded.

Vernon R. Pederson, Surrogate Justice, filed specially concurring opinion.

1. Electricity ⇐8.1(2)

Primary purpose of Territorial Integrity Act was to keep to minimum wasteful duplication of capital-intensive utility services and conflicts between suppliers of electricity. NDCC 49–03–01, 49–03–05.

2. Electricity ⇐8.1(3)

Statute governing eligibility of persons to be members of electric cooperatives does not prohibit rural electric cooperative from continuing to provide service within area after area has been annexed by municipality. NDCC 10–13–04, 49–03–01.3.

3. Electricity ⇐8.1(4)

Statute specifically contemplating possibility of continued electric service by rural electric cooperative within area annexed by municipality controlled over statutes addressing interference with service or system of another electrical supplier in general, for purposes of determining whether rural electric cooperative was entitled to order restraining and enjoining utility's construction and extension of electric lines and system into subdivision that was in area annexed by city. NDCC 49–03–01, 49–03–01.3, 49–03–01.4.

4. Electricity ⇐8.1(4)

Public Service Commission had authority to act in territorial dispute between rural electric cooperative and electric public utility over provision of service to subdivision within area annexed by city, even though cooperative did not yet serve any customers in subdivision; there was agreement between cooperative and city allowing cooperative to serve new customers after annexation. NDCC 49–03–01.3.

5. Electricity ⇐8.1(3)

In territorial dispute between rural electric cooperative and electric public utility over provision of service to subdivision within area annexed by city, Public Service Commission must look at existing electric facilities that both entities have in place in area and determine whether extension of utility's services in subdivision would constitute unreasonable duplication of capital-intensive facilities and services already provided by cooperative; if Territorial Integrity Act were interpreted to prohibit only interference with actual service to existing customers, PSC would have no authority to act, regardless of amount of duplication, and utility could extend its services to areas as small as city lots without creating "unreasonable duplication of services." NDCC 49–03–01.3.

6. Statutes ⇐228

Use of word "provided" in statute does not in and of itself convert words following into "proviso"; word may also be used in conjunctive sense.

7. Electricity ⇐8.1(3)

Use of word "provided" in statute recognizing that rural electric cooperative may lawfully provide electric services within area annexed by municipality, provided that extension not interfere with existing services from rural electric cooperative or another electric public utility within municipality, did not create proviso under which

electric utility could be permitted to extend service into annexed area without certificate of public convenience and necessity. NDCC 49-03-01.3.

Vogel, Brantner, Kelly, Knutson, Weir & Bye, Ltd., Fargo, for appellee; argued by John D. Kelly. Appearance by Douglas R. Herman.

Wheeler, Wolf, Peterson, Schmitz, McDonald & Johnson, Bismarck, and David Lawrence, Legal Div., Northern States Power Co., Minneapolis, Minn., for appellant; argued by Ronald W. Wheeler, Bismarck. Appearance by David Lawrence, Minneapolis.

Lynn Lee Schloesser, Public Service Com'n, Bismarck, for North Dakota Public Service Com'n. No appearance.

ERICKSTAD, Chief Justice.

This case involves a territorial dispute between Cass County Electric Cooperative, Inc. [Cass], a rural electric cooperative, and Northern States Power Company [NSP], an electric public utility, over an area known as the South Pointe 1st Addition [South Pointe] within the city of Fargo. NSP appeals from a district court judgment which reversed a decision of the Public Service Commission [PSC] and remanded for further proceedings concerning Cass's request for injunctive relief under the provisions of the Territorial Integrity Act, Chapter 49-03, N.D.C.C. We affirm the judgment of the district court.

Cass provides electric service in Cass County, as well as seven other counties in the state. NSP provides electric and natural gas service in North Dakota and elsewhere. NSP has been authorized by the PSC, and has had a franchise, to provide electric service as an electric utility in the city of Fargo for more than 50 years.

For many years prior to 1975, Cass and NSP were parties to a "territorial agreement" which was designed to avoid "wasteful duplication" of electric facilities and covered areas in and around the cities of West Fargo and Fargo. One of the areas covered by the agreement and designated to be served by Cass was Barnes Township, where South Pointe is located. This agreement, however, was abandoned by the parties in 1975, and on October 28, 1975, Cass and the city of Fargo entered into an agreement giving Cass a nonexclusive right-of-way for its facilities in areas served by Cass and subsequently annexed by the city. Under the terms of this agreement, any area served by Cass which was annexed to the city would remain Cass's service area absent an objection by the city or another electric supplier.

In 1978 the city annexed a large area served by Cass south of 32nd Avenue South and west of U.S. Highway 81. The area now known as South Pointe is part of this annexed territory. No objections were lodged to Cass's claim to serve existing and new customers within the annexed area, and, prior to October 1986, Cass was the only supplier of electricity in the annexed territory. Cass included the annexed area in its long-range plans and has made large investments in facilities to serve that area. However, Cass has not provided service to an actual customer in the specific area now designated as South Pointe since 1981.

During August 1986, the developer of South Pointe conferred with officials of NSP and Cass concerning electric service for the new subdivision, which consists of one large commercial lot and 90 residential lots. The developer chose to request electric service as well as natural gas service from NSP, and the developer and NSP signed an agreement to that effect on August 28, 1986. At this time, the area platted as South Pointe was vacant. Both Cass and NSP serve electric account customers on property adjoining the new subdivision.

Cass filed a complaint with the PSC alleging that NSP's extension of its electric lines and system into South Pointe would "unreasonably interfere with Cass Electric's services, facilities and system and will result in a wasteful and unreasonable duplication" of its "investment in plant facilities and services." Cass sought an order restraining and enjoining NSP from constructing and extending its electric

lines, system, and facilities into South Pointe.

In the administrative proceedings, Cass asserted that although it has no customers which it presently serves in South Pointe, NSP's extension into the subdivision interferes with the economic viability of the electric system Cass has developed to serve the larger annexed area, and that this interference constitutes a violation of §§ 49–03–01 and 49–03–01.4, N.D.C.C. The PSC concluded that its authority to act under these circumstances was limited by § 49–03–01.3, N.D.C.C., which provides in pertinent part:

> *"49–03–01.3. Exclusions from limitations on electric distribution lines, extension and service and on issuance of certificates of public convenience and necessity.* Sections 49–03–01 through 49–03–01.5 shall not be construed to require any such electric public utility to secure such order or certificate for an extension of its electric distribution lines within the corporate limits of any municipality within which it has lawfully commenced operations; provided, however, that such extension or extensions shall not interfere with existing services provided by a rural electric cooperative or another electric public utility within such municipality; and provided duplication of services is not deemed unreasonable by the commission."

Because Cass was not presently providing any electric service to customers within the subdivision, the PSC determined that under the provisions of § 49–03–01.3, NSP's extension of its electric distribution facilities did not "interfere with existing electric service of Cass ... nor unreasonably duplicate services within South Pointe." Consequently, the PSC dismissed Cass's complaint.

The district court reversed and remanded the case to the PSC for further consideration, concluding that the PSC's interpretation of § 49–03–01.3 was "too restrictive:"

> "The commission in this case read the language which refers to existing services as only meaning those identifiable sites which are already being served at the time that incorporation is completed by a municipality. I am of the opinion that this is too restrictive of a reading. If that were true, the last line in the paragraph would be unnecessary in its reference to duplication of services. It is my belief that the commission must look at the availability of services in the area annexed and determine whether extension of NSP lines would be unnecessarily duplicating the services provided by Cass. If so, the injunction requested by Cass County should be granted since they have the right to serve in the general area involved in this proceeding. If not, and the commission determines that it is in the best interest of the general public, and the public convenience and necessity requires it, then the extension of NSP's line should be allowed and the injunction denied. However, this does require the commission to exercise its discretion in the interpretation of the statute and this case should not be handled as if it were a matter of law. The statute must be read more liberally than the reading presently given it by the PSC."

NSP has appealed from the district court's judgment.

The issue in this case is whether the PSC properly interpreted the provisions of the Territorial Integrity Act, Chapter 49–03, N.D.C.C., in determining in essence that it had no authority to act under the circumstances. This issue presents a question of law and, consequently, the PSC's determination on the matter is fully reviewable by this court. *Minnesota Mining and Manufacturing Co. v. Conrad*, 418 N.W.2d 276, 279 (N.D.1987).

[1] The Territorial Integrity Act was enacted by the Legislature in 1965. *See* 1965 N.D.Sess.Laws Ch. 319. It amended §§ 49–03–01 and 49–03–05, N.D.C.C., which required a public utility, before beginning construction or operation of a public utility plant or system, or an extension thereof, to obtain from the PSC a certificate of public convenience and necessity. *See Montana–Dakota Utilities Co. v. Johanneson*, 153 N.W.2d 414, 418 (N.D.1967). The primary

purpose of the Act was to keep to a minimum wasteful duplication of capital-intensive utility services and conflicts between suppliers of electricity. *See Cass Cty. Elec. Coop., Inc. v. Wold Properties, Inc.*, 249 N.W.2d 514, 520–521 (N.D.1976). The cases decided under this Act have thus far generally involved situations where an electric public utility seeks to serve customers in rural areas outside the corporate limits of a municipality. *E.g., Tri-County Electric Cooperative, Inc. v. Elkin*, 224 N.W. 2d 785, 787 (N.D.1974). As the PSC noted in its order, the present case "is the first time a cooperative in North Dakota has attempted to prevent a utility extension within a municipality on the grounds that the extension interferes with the economic viability of the cooperative's system."

[2] NSP initially asserts that Cass is prohibited from providing electric service in South Pointe after its annexation by the city because under § 10–13–04, N.D.C.C., no resident of the city of Fargo is eligible for membership in a rural electric cooperative. Section 10–13–04 provides in pertinent part:

> *"10–13–04. Members of electric cooperatives.* All persons who are not receiving central station service and who reside in rural areas proposed to be served by a cooperative organized under this chapter, shall be eligible to membership in the cooperative. No person other than the incorporators shall be, become, or remain a member of a cooperative unless such person shall use or agree to use electrical energy or the facilities, supplies, equipment, and services furnished by a cooperative.
>
> " 'Rural area' means any area not included within the boundaries of an incorporated city having a population in excess of twenty-five hundred inhabitants at the time a corporation or cooperative commences to operate electric facilities or to furnish electric energy in such an area, and includes both the farm and nonfarm population thereof. No change thereafter in the population of a rural area, as defined herein, regardless of the reason for such change, shall operate to affect in any way its status as a rural area for the purposes of this chapter and of chapter 57–33."

NSP contends that a "rural area" loses its status as such under the statute once it is annexed by a municipality. NSP asserts that the language "[n]o change thereafter in the population of a rural area, ... regardless of the reason for such change, shall operate to affect in any way its status as a rural area ..." was only intended to mean that a city with fewer than 2,500 inhabitants that is served by an electric cooperative shall remain a "rural area" even if the population subsequently exceeds the statutory limit. We reject NSP's narrow interpretation of the statute.

Section 49–03–01.3, N.D.C.C., implicitly recognizes that a rural electric cooperative may lawfully provide electric services within a municipality which is served by an electric public utility. We are required to construe together all statutes relating to the same subject matter so as to harmonize them, if possible, and give full force and effect to the legislative intent. *Dickinson Public School Dist. No. 1 v. Scott*, 252 N.W.2d 216, 219 (N.D.1977). We believe it is possible to harmonize these provisions. NSP's assertion is premised on the theory that the language "[n]o change thereafter in the population of a rural area, ... regardless of the reason for such change ..." is not comprehensive enough to include a municipality's act of annexation because the population of a "rural area" is not actually changed through annexation. However, annexation is defined in its purist sense as the uniting of one thing to another. *See* Black's Law Dictionary 81 (5th ed. 1979). Thus, when a "rural area" is annexed by a municipality, its population in effect "changes" because it has become united with that of the municipality of which it is now a part. In view of § 49–03–01.3, which specifically contemplates the possibility of continued electric service by a cooperative within an annexed area, we conclude that § 10–13–04 does not prohibit Cass from providing electric service in South Pointe.

Cass relied upon §§ 49–03–01 and 49–03–01.4, N.D.C.C., in seeking to enjoin NSP from extending its facilities into South Pointe. Those statutes provide in pertinent part:

"*49–03–01. Certificate of public convenience and necessity—Secured by electric public utility.*—No electric public utility henceforth shall begin construction or operation of a public utility plant or system, or of an extension of a plant or system, except as provided below, without first obtaining from the commission a certificate that public convenience and necessity require or will require such construction and operation. This section does not require an electric public utility to secure a certificate for an extension within any municipality within which it has lawfully commenced operations. If any electric public utility in constructing or extending its line, plant, or system, unreasonably interferes with or is about to interfere unreasonably with the service or system of any other electric public utility, or any electric cooperative corporation, the commission, on complaint of the electric public utility or the electric cooperative corporation claiming to be injuriously affected, after notice and hearing as provided in this title, may order enforcement of this section with respect to the offending electric public utility and prescribe just and reasonable terms and conditions."

"*49–03–01.4. Enforcement of act.*—If any electric public utility violates or threatens to violate any of the provisions of sections 49–03–01 through 49–03–01.5 or interferes with or threatens to interfere with the service or system of any other electric public utility or rural electric cooperative, the commission, after complaint, notice, and hearing as provided in chapter 28–32, shall make its order restraining and enjoining said electric public utility from constructing or extending its interfering lines, plant or system. In addition to the restraint imposed, the commission shall prescribe such terms and conditions as it shall deem reasonable and proper."

[3] Cass asserts that the PSC was obligated to enjoin NSP's actions under §§ 49–03–01 and 49–03–01.4, regardless of the provisions of § 49–03–01.3. We disagree. In the construction and interpretation of statutes, a special or more specific provision must prevail over general provisions relating to the same subject matter, absent a manifestation of legislative intent to the contrary. *Mid-America Real Estate & Inv. Corp. v. Lund*, 353 N.W.2d 286, 289–290 (N.D.1984). While §§ 49–03–01 and 49–03–01.4 address interference with the service or system of another electric supplier in general, § 49–03–01.3 specifically addresses the interference prohibited when a public utility extends its lines within a municipality. Moreover, if we were to accept Cass's argument, the provisions of § 49–03–01.3 would be rendered meaningless. We conclude that the PSC correctly determined that § 49–03–01.3 is applicable in this case.

[4] The PSC's conclusion that § 49–03–01.3 provided it with the authority to act only if NSP's extension interfered with services provided to actual customers of Cass within South Pointe is premised on two bases. First, the PSC relied upon the following statement of this court in *Tri-County Electric Cooperative, Inc. v. Elkin*, 224 N.W.2d 785, 794 (N.D.1974):

> "Even if it should be true that the area in question will eventually be annexed to the city of Jamestown, that eventuality has been provided for by law insofar as the orderly continuance or transfer of electric service systems is concerned. The cooperative could continue to serve its customers until such time as its property in the annexed area is acquired by the franchised utility by negotiation or eminent domain. *Montana-Dakota Utilities Co. v. Divide County School District No. 1*, 193 N.W.2d 723 (N.D. 1972). Or the City could give the cooperative a franchise to continue to serve the customers it is serving."

The PSC concluded that "[t]his dicta suggests the Court contemplated the possibility of continued service by a cooperative to *existing* customers subsequent to annexa-

tion. There is no indication the Court believed the annexed area could remain the exclusive service area of the cooperative." [Emphasis in original.]

We initially note, as did the PSC, that the above-quoted statement in *Tri-County Electric* is dictum. Under the facts in *Tri-County Electric, supra*, 224 N.W.2d at 788, the public utility held "the only franchise to supply electricity within the city limits of Jamestown." The court was not confronted with a situation where an agreement between the cooperative and the city allowed the cooperative to serve new customers after annexation, as in this case. In any event, dictum is not controlling in subsequent cases. *Bakke v. St. Thomas Public School Dist. No. 43*, 359 N.W.2d 117, 120 (N.D.1984). We do not find *Tri-County Electric* persuasive authority for the proposition that cooperatives are statutorily precluded from serving new customers within an annexed area.

[5] Second, the PSC relied upon an amendment to § 49–03–01.3 before its passage by the Legislature in 1965. When originally introduced as a part of House Bill 724, the first paragraph of § 49–03–01.3 provided:

> "SECTION 4. EXCLUSIONS FROM LIMITATIONS ON ELECTRIC DISTRIBUTION LINES, EXTENSION AND SERVICE AND ON ISSUANCE OF CERTIFICATES OF PUBLIC CONVENIENCE AND NECESSITY. This Act shall not be construed to require any such electric public utility to secure such order or certificate for an extension of its electric distribution lines within the corporate limits of any municipality within which it has lawfully commenced operations; provided, however, that such extension or extensions shall not interfere with existing *or available* services provided by a rural electric co-operative or another electric public utility within such municipality; and...." [Emphasis added.]

Before passage, the bill was amended by deleting the words "or available" and inserting as the final sentence of the paragraph, "provided duplication of services is not deemed unreasonable by the public service commission." The PSC reasoned that this amendment resulted in the Legislature's adoption of "a narrower definition of interference than that urged by Cass...."

We reject the PSC's conclusion regarding the effect of the bill's amendment. Although "available services" was deleted from the provision, the final sentence, "provided duplication of services is not deemed unreasonable by the public service commission," was also added. If the statute were interpreted to prohibit only interference with actual service to existing customers, the last sentence of the first paragraph of § 49–03–01.3 could only be ascribed a meaning which is wholly at odds with the paramount purpose of the Territorial Integrity Act. While this court has in the past declined to say whether rural electric cooperatives or public utilities were given special preference as suppliers of electricity under the Act, we have recognized that keeping to a minimum wasteful duplication of capital-intensive utility services is one of its primary goals. *See Wold Properties, Inc., supra*, 249 N.W.2d at 520–521. Under the PSC's analysis, it would have no authority to act, regardless of the amount of duplication in investments and electric facilities in an annexed area, unless NSP attempted to serve a customer already being served by Cass, and under that rationale, NSP could extend its services to areas as small as city lots without creating an unreasonable duplication of services under the statute. We do not believe this was intended by the Legislature when it enacted the Territorial Integrity Act.

We agree with the district court that the PSC interpreted the statute too narrowly. The PSC must look at the existing electric facilities that Cass and NSP have in place in the area and determine whether extension of NSP's services in South Pointe would constitute an unreasonable duplication of capital-intensive facilities and services already provided by Cass.

NSP argues that even if its utility extension interferes with existing cooperative service or unreasonably duplicates cooperative facilities, the extension can be ap-

proved by the PSC because the proviso in § 49–03–01.3 must be interpreted as a limitation only upon the public utility's right to extend within a municipality without a certificate of public convenience and necessity. The proviso, NSP contends, cannot be enlarged to constitute a prohibition. We disagree.

[6, 7] It is generally true, as asserted by NSP, that the purpose of a proviso in a statute is to modify the enacting clause and not to enlarge it or to confer a power. But the use of the word "provided" does not in and of itself convert the words following into a "proviso;" the word may also be used in a conjunctive sense. *See Bowers v. Missouri Mut. Ass'n*, 333 Mo. 492, 62 S.W. 2d 1058, 1063 (1933); *McKenna v. Roberts County*, 72 S.D. 250, 32 N.W.2d 687, 689 (1948). Thus, the general principle "is not unbending and if a consideration of all statutes bearing upon the subject indicates a different Legislative intent, this will prevail over a construction based upon the rules of syntax." *Kinney Loan & Finance Co. v. Sumner*, 159 Neb. 57, 65 N.W.2d 240, 248 (1954). *See also* 2A Sutherland Stat.Const. § 47.08 (4th ed. 1984).

As noted earlier, wasteful duplication of investment, facilities, and service is what the Territorial Integrity Act was intended to minimize. *See Wold Properties, Inc., supra*, 249 N.W.2d at 521. This consideration is also a primary factor in determining whether a certificate of public convenience and necessity should issue. *See Tri-County Electric, supra*, 224 N.W.2d at 792–793. We do not believe the Legislature intended the anomalous consequence of allowing the PSC to grant a certificate of public convenience and necessity for an extension of service after the PSC has already determined that such an extension not only interferes with the existing services and facilities of a cooperative but also constitutes an "unreasonable" duplication of such services and facilities.[1]

Accordingly, we affirm the judgment of the district court and remand this case to the PSC for a determination of whether or not NSP's extension interferes with and would constitute an unreasonable duplication of investment and available facilities and services provided by Cass. If so, the injunction requested by Cass should be granted. If not, NSP's extension should be allowed and Cass's request for an injunction denied.

VANDE WALLE, GIERKE and MESCHKE, JJ., concur.

VERNON R. PEDERSON, Surrogate Justice, sitting in place of LEVINE, J., disqualified.

VERNON R. PEDERSON, Surrogate Justice, concurring specially.

I concur in the result which Chief Justice Erickstad has reached, however, I would have couched the opinion in different terms so as to make certain that it would not be misunderstood with respect to the scope of review in the supreme court of administrative determinations that have already been reviewed by a district court either under the Administrative Agencies Practice Act (Ch. 28–32, NDCC) or otherwise.

Recently this court, in *Otto v. Job Service North Dakota*, 390 N.W.2d 550, 551 (N.D.1986), said that on appeals from administrative determinations:

> include: the location of the lines of the suppliers; the reliability of the service which will be rendered by them; which of the proposed suppliers will be able to serve the area more economically and still earn an adequate return on its investment; and which supplier is best qualified to furnish electric service to the site designated in the application and which also can best develop electric service in the area in which such site is located without wasteful duplication of investment or service.' 169 N.W.2d 415, at 418."

1. We do not imply that the factors for consideration of whether or not a certificate of public convenience and necessity should be granted are irrelevant to the PSC's determination of an unreasonable duplication of services under § 49–03–01.3, N.D.C.C. Those criteria are set forth in *Tri-County Electric Cooperative, Inc. v. Elkin*, 224 N.W.2d 785, 791 (N.D.1974):

> "[I]n *Application of Otter Tail Power Co.*, 169 N.W.2d 415 (N.D.1969), ... it was stated that 'customer preference should be considered' and
>
> " 'there are a number of other factors which also must be considered ... These factors

"We review the decision of the agency rather than the decision of the district court ..."

Similar statements are found in: *Perske v. Job Service North Dakota*, 336 N.W.2d 146 (N.D.1983); *Application of Nebraska Public Power Dist*, 330 N.W.2d 143, 146 (N.D.1983); *Lee v. Gulf Oil Exploration and Production*, 318 N.W.2d 766, 768 (N.D.1982); *Barnes County v. Garrison Diversion, Etc.*, 312 N.W.2d 20, 25 (N.D. 1981); and *Shaw v. Burleigh County*, 286 N.W.2d 792, 797 (N.D.1979). See also *Geo. E. Haggart, Inc. v. North Dakota Work. Comp. Bur.*, 171 N.W.2d 104 (N.D.1969).

Customer Name _____
Com. Acct. Represented _____
Class of Service _____
Load Area _____
Contact Month _____
Follow Up Month _____
Contact Made By _____
Comments _____

Customer Name _____
Com. Acct. Represented _____
Class of Service _____
Load Area _____
Contact Month _____
Follow Up Month _____
Contact Made By _____
Comments _____

Customer Name _____
Com. Acct. Represented _____
Class of Service _____
Load Area _____
Contact Month _____
Follow Up Month _____
Contact Made By _____
Comments _____

Customer Name _____
Com. Acct. Represented _____
Class of Service _____
Load Area _____
Contact Month _____
Follow Up Month _____
Contact Made By _____
Comments _____

Customer Name	Coo. Acct. Representec	Class of Service	Load Area	Contact Month	Follow Up Month	Contact Made By	Comments
BARGER, PAUL		IRRIGATION	WELLS	26-Jan-89	01-Jul-89	ML	
BASSINGER, [illegible]		RESIDENTIAL	WELLS	26-Jan-89	01-Jul-89	ML	
BOALEN, AES	BURGER BAR	COMMERCIAL	WELLS	25-Jan-89	01-Jul-89	DK	
CHAPIN, WANDA		RESIDENTIAL	WELLS	26-Jan-89	01-Jul-89	BW	
CORBE, CHUCK	EL RANCHO	COMMERCIAL	WELLS	26-Jan-89	01-Jul-89	PJ	USAGE QUESTION
DIGRAZIA, SONNY	DIGRAZIA WHOLESALE	COMMERCIAL	WELLS	26-Jan-89	01-Jul-89	DK	
DIXON, DEE		RESIDENTIAL	WELLS	25-Jan-89	01-Jul-89	PJ	
GAILEY, BOYD		RESIDENTIAL	WELLS	26-Jan-89	01-Jul-89	DK	
GARCIA, EDWARD		RESIDENTIAL	WELLS	25-Jan-89	01-Jul-89	CF	ENERGY AUDIT
HERRON, LARRY	STATELINE CASINO	COMMERCIAL	WENDOVER	26-Jan-89	01-Jul-89	DK	
HOVAN, PAUL	NEWMONT MINING	COMMERCIAL	CARLIN	26-Jan-89	01-Jul-89	DK	
HOWELL, FRED		IRRIGATION	WELLS	26-Jan-89	01-Jul-89	ML	
HUSTEAD, JOHN		RESIDENTIAL	WELLS	26-Jan-89	01-Jul-89	DK	
JONES, BEA		RESIDENTIAL	WELLS	25-Jan-89	01-Jul-89	CF	
LUTSPEICH, DON		RESIDENTIAL	WELLS	26-Jan-89	01-Jul-89	BW	
MOSCHETTI, PAUL	WELLS AUTO PARTS	COMMERCIAL	WELLS	26-Jan-89	01-Jul-89	PJ	THOUSAND SPRINGS
MOSCHETTI, STEVE	MOSCHETTI ICE	COMMERCIAL	WELLS	26-Jan-89	01-Jul-89	PJ	POSSIBLE VOLTAGE PROBLEM
NOTESTINE, PATTI		RESIDENTIAL	WELLS	26-Jan-89	01-Jul-89	PJ	
REYNOLDS, J.D.		RESIDENTIAL	WELLS	26-Jan-89	01-Jul-89	CF	
RODRIGUEZ, BILL		IRRIGATION	WELLS	26-Jan-89	01-Jul-89	DK	
SMITH, KEVIN		RESIDENTIAL	WELLS	26-Jan-89	01-Jul-89	BW	
SMITH, PAUL		IRRIGATION	WELLS	26-Jan-89	01-Jul-89	ML	LINE EXTENSION INQUIRY
STRICKLAND, JOHN		RESIDENTIAL	WELLS	26-Jan-89	01-Jul-89	PJ	SUPER GOOD CENTS INFORMATION
STUART, LAMONT	WELLS PHARMACY	COMMERCIAL	WELLS	26-Jan-89	01-Jul-89	PJ	
TAYLOR, SCOTT		RESIDENTIAL	WELLS	26-Jan-89	01-Jul-89	BW	
TYBO, RUSTY		RESIDENTIAL	WELLS	26-Jan-89	01-Jul-89	PJ	
WILSON, DOUG		RESIDENTIAL	WELLS	26-Jan-89	01-Jul-89	CF	
ZERGA,LARRY	NEWMONT MINING	COMMERCIAL	CARLIN	26-Jan-89	01-Jul-89	DK	
ANDERSON, JACK	ANDERSON CONSTRUCTION	COMMERCIAL	WELLS	17-Feb-89	01-Aug-89	PJ	
BIRDWELL, MEL		RESIDENTIAL	WELLS	17-Feb-89	01-Aug-89	ML	ENERGY AUDIT
BOWLEN, BRAD		RESIDENTIAL	WELLS	17-Feb-89	01-Aug-89	CF	
CAVALERO, RAY		RESIDENTIAL	WELLS	17-Feb-89	01-Aug-89	ML	ADDITIONAL OUTAGE NUMBER
COOPER, DON	OLD WEST INN	COMMERCIAL	WELLS	17-Feb-89	01-Aug-89	DK	
ERIKSEN, JAY		RESIDENTIAL	WELLS	17-Feb-89	01-Aug-89	BW	
FEDERLINE, JULIE		RESIDENTIAL	WELLS	17-Feb-89	01-Aug-89	DK	
GIERHART, CHARLIE	TOANA CORPORATION	COMMERCIAL	WENDOVER	17-Feb-89	01-Aug-89	PJ	WANTS MORE SUPER GOOD CENTS INFO
GRISWOLD, PAT		RESIDENTIAL	CARLIN	17-Feb-89	01-Aug-89	PJ	
HUTCHINSON, STEVE		RESIDENTIAL	WELLS	17-Feb-89	01-Aug-89	DK	
JOHNS, KENNETH		RESIDENTIAL	WELLS	17-Feb-89	01-Aug-89	DK	
KAUFMAN, AL		RESIDENTIAL	CARLIN	17-Feb-89	01-Aug-89	DK	
KING, BOB		RESIDENTIAL	WELLS	17-Feb-89	01-Aug-89	CF	
LARSON, BOB		RESIDENTIAL	WELLS	17-Feb-89	01-Aug-89	BW	
LINGE, DAVE		RESIDENTIAL	WELLS	17-Feb-89	01-Aug-89	CF	
MARTIN, JOHN		RESIDENTIAL	WELLS	17-Feb-89	01-Aug-89	DK	
MENSCHING, RON		RESIDENTIAL	WELLS	17-Feb-89	01-Aug-89	PJ	
PUETT, FRAISER		RESIDENTIAL	CARLIN	17-Feb-89	01-Aug-89	ML	LINECREW PROBLEM
PYPER, VIRGINIA		RESIDENTIAL	WELLS	17-Feb-89	01-Aug-89	ML	TRIM TREES
REBER, GRANT		RESIDENTIAL	WELLS	17-Feb-89	01-Aug-89	DK	
REMINGTON, DENNIS		RESIDENTIAL	WELLS	17-Feb-89	01-Aug-89	DK	ENERGY AUDIT, SPPCO PLANT
REYNOLDS, RAY		RESIDENTIAL	WELLS	17-Feb-89	01-Aug-89	PJ	
SAVEDRA, RICARDO		RESIDENTIAL	WELLS	17-Feb-89	01-Aug-89	CF	
SWANSON, DAVE		RESIDENTIAL	WELLS	17-Feb-89	01-Aug-89	BW	
SWETT, MARIE		RESIDENTIAL	WELLS	17-Feb-89	01-Aug-89	BW	
TRAVLAND, AL		RESIDENTIAL	WENDOVER	17-Feb-89	01-Aug-89	PJ	WANTS ENERGY USE INFO
WEIGHT, DON	WELLS HIGH SCHOOL	COMMERCIAL	WELLS	17-Feb-89	01-Aug-89	DK	
WHITED, JIM		IRRIGATION	WELLS	17-Feb-89	01-Aug-89	PJ	
YAN, GEORGE	CHINATOWN RESTAURANT	COMMERCIAL	WELLS	17-Feb-89	01-Aug-89	PJ	QUESTIONS ON DEMAND

[illegible]		RESIDENTIAL	CARLIN	24-Mar-89	01-Sep-89	PJ	
[illegible]NNRUM, SHARON		RESIDENTIAL	CARLIN	24-Mar-89	01-Sep-89	PJ	
[illegible]TONY, AL		RESIDENTIAL	CARLIN	24-Mar-89	01-Sep-89	DK	
[illegible] DENNY		RESIDENTIAL	WELLS	24-Mar-89	01-Sep-89	CF	
[illegible]PPELL, MARVIN		RESIDENTIAL	WELLS	24-Mar-89	01-Sep-89	DK	
COLLINS, JOHN		RESIDENTIAL	WENDOVER	24-Mar-89	01-Sep-89	DK	34 DAY BILLING PERIOD
CROUSE, DAVE		RESIDENTIAL	CARLIN	24-Mar-89	01-Sep-89	PJ	
DEDMAN, RANDY		RESIDENTIAL	WELLS	24-Mar-89	01-Sep-89	WL	
DEEFER, BILL		RESIDENTIAL	WELLS	24-Mar-89	01-Sep-89	CF	
[illegible]LTON, GRANT	CRESTED ACRES	COMMERCIAL	WELLS	24-Mar-89	01-Sep-89	WL	
[illegible]TTLEDYKE, DOYLE		RESIDENTIAL	WELLS	24-Mar-89	01-Sep-89	DK	
MACANALY, RIC	NEWMONT MINING	COMMERCIAL	CARLIN	24-Mar-89	01-Sep-89	CF	
MARTINDALE, JERRY		RESIDENTIAL	WELLS	24-Mar-89	01-Sep-89	BW	
MAUER, JIM		RESIDENTIAL	WELLS	24-Mar-89	01-Sep-89	BW	
MCCLERY, ELOISE		IRRIGATION	WELLS	24-Mar-89	01-Sep-89	DK	
MCCLERY, NICKI		RESIDENTIAL	WELLS	24-Mar-89	01-Sep-89	DK	
MCGUIS, TERRY		RESIDENTIAL	WELLS	24-Mar-89	01-Sep-89	PJ	
MYDEN, ANDY		RESIDENTIAL	CARLIN	24-Mar-89	01-Sep-89	PJ	
[illegible]ETHERY, BARBARA		RESIDENTIAL	CARLIN	24-Mar-89	01-Sep-89	PJ	
PACINI, ALDO		RESIDENTIAL	CARLIN	24-Mar-89	01-Sep-89	WL	WANTS PROPERTY CORNERS SURVEYED
SANDERS, JOHN		RESIDENTIAL	WELLS	24-Mar-89	01-Sep-89	BW	
STROUP, LENNY		RESIDENTIAL	WELLS	24-Mar-89	01-Sep-89	BW	
THOMPSON, TOMMY		RESIDENTIAL	WELLS	24-Mar-89	01-Sep-89	CF	
TROUSDALE, EARL	CITY OF CARLIN	COMMERCIAL	CARLIN	24-Mar-89	01-Sep-89	PJ	
WALKER, TINA		RESIDENTIAL	WELLS	24-Mar-89	01-Sep-89	PJ	
WELLS, GENE		RESIDENTIAL	WELLS	24-Mar-89	01-Sep-89	WL	
WILCOX, BOB		RESIDENTIAL	CARLIN	24-Mar-89	01-Sep-89	DK	
WRIGHT, HOWARD	H.R. AUTO	COMMERCIAL	CARLIN	24-Mar-89	01-Sep-89	DK	LIKE LIGHT POLE MOVED
[illegible]NDERSON, YVETTE		RESIDENTIAL	WELLS	28-Apr-89	01-Oct-89	CF	
[illegible]LE		IRRIGATION	CARLIN	28-Apr-89	01-Oct-89	DK	
[illegible].S.		RESIDENTIAL	CARLIN	28-Apr-89	01-Oct-89	DK	BILLING QUESTION
[illegible]LYNN		RESIDENTIAL	WELLS	28-Apr-89	01-Oct-89	DK	USAGE
[illegible]ROUGH, BRIDGETTE		RESIDENTIAL	WELLS	28-Apr-89	01-Oct-89	PJ	
[illegible]LLAHAN, MARIANNE		RESIDENTIAL	WELLS	28-Apr-89	01-Oct-89	CF	
[illegible]PIN, EDDIE		RESIDENTIAL	WELLS	28-Apr-89	01-Oct-89	BW	
[illegible]PELAN, HARRY	HIGH DESERT ADVOCATE	COMMERCIAL	WENDOVER	28-Apr-89	01-Oct-89	DK	QUESTIONS ABOUT LEGISLATIVE BILLS
[illegible]RAFORD, MIKE		RESIDENTIAL	WENDOVER	28-Apr-89	01-Oct-89	DK	
[illegible]NN, HAL		RESIDENTIAL	WELLS	28-Apr-89	01-Oct-89	BW	
[illegible]RESBERG, LYNN		IRRIGATION	WENDOVER	28-Apr-89	01-Oct-89	DK	
FOX, CHARLES		RESIDENTIAL	WENDOVER	28-Apr-89	01-Oct-89	PJ	
[illegible]BBS, LENA		RESIDENTIAL	WELLS	28-Apr-89	01-Oct-89	PJ	WREC SHOULD PROVIDE APPLIANCE SALES, REPAIR & ELECTRICIAN
HERNANDEZ, JOHN		RESIDENTIAL	WENDOVER	28-Apr-89	01-Oct-89	DK	
[illegible]DA, KATHY		RESIDENTIAL	WELLS	28-Apr-89	01-Oct-89	PJ	
JAMES, DARLENE		RESIDENTIAL	CARLIN	28-Apr-89	01-Oct-89	WL	
[illegible]NRADE, BILL		RESIDENTIAL	WELLS	28-Apr-89	01-Oct-89	DK	REFIGURED BUDGET BILL & DISCUSSED METER LOOP
[illegible]NO, JAMES		IRRIGATION	WELLS	28-Apr-89	01-Oct-89	PJ	IRRIGATION PROGRAM
MEIR-OFF, RALPH		RESIDENTIAL	CARLIN	28-Apr-89	01-Oct-89	DK	
MICHELI, FRANK		RESIDENTIAL	CARLIN	28-Apr-89	01-Oct-89	DK	
MONTOYA, ADELITA		RESIDENTIAL	WELLS	28-Apr-89	01-Oct-89	PJ	WREC SHOULD PROVIDE APPLIANCE SALES, REPAIR & ELECTRICIAN
MUSE, DENNIS		RESIDENTIAL	WELLS	28-Apr-89	01-Oct-89	WL	
PAINTER, BETH		RESIDENTIAL	WELLS	28-Apr-89	01-Oct-89	BW	
PERRY, STEVE		RESIDENTIAL	WENDOVER	28-Apr-89	01-Oct-89	WL	
[illegible]ILPOT, BOB	WELLS POST OFFICE	COMMERCIAL	WELLS	28-Apr-89	01-Oct-89	CF	
[illegible]BBERT, RUTH		RESIDENTIAL	WELLS	28-Apr-89	01-Oct-89	DK	
[illegible]LICI, JOHN	QUILICI'S MARKET	COMMERCIAL	WELLS	28-Apr-89	01-Oct-89	DK	PROBLEM PAYING BILL
RASMUSSEN, ANITA		RESIDENTIAL	CARLIN	28-Apr-89	01-Oct-89	PJ	
REMINGTON, LYNETTE	HEADSTART	COMMERCIAL	WELLS	28-Apr-89	01-Oct-89	PJ	WREC SHOULD PROVIDE APPLIANCE SALES, REPAIR & ELECTRICIAN
REECH, MIKE	MT. SHADOWS RV PARK	COMMERCIAL	WELLS	28-Apr-89	01-Oct-89	CF	

BERTAGNOLLI, TONY		IRRIGATION	CARLIN	28-Apr-89	01-Oct-89	DK	
BRANTON, JIM		RESIDENTIAL	WELLS	28-Apr-89	01-Oct-89	BW	
STEWART, DALE		RESIDENTIAL	WENDOVER	28-Apr-89	01-Oct-89	WL	BILL HIGH BUT BETTER THAN LAST YEAR
STEWART, ROBERT		RESIDENTIAL	WENDOVER	28-Apr-89	01-Oct-89	PJ	
WELIG, HERB		IRRIGATION	WELLS	28-Apr-89	01-Oct-89	PJ	
WINCHELL, WALT		RESIDENTIAL	WELLS	28-Apr-89	01-Oct-89	DK	
WINES, LEONARD		RESIDENTIAL	WELLS	28-Apr-89	01-Oct-89	DK	
BENNETT, DAN		RESIDENTIAL	WELLS	26-May-89	01-Nov-89	WL	
BERRY, BOB	NEVADA CROSSING	COMMERCIAL	WENDOVER	26-May-89	01-Nov-89	DK	
BUSH, MIKE		RESIDENTIAL	WELLS	26-May-89	01-Nov-89	PJ	
DINSMORE, CHRIS		RESIDENTIAL	WELLS	26-May-89	01-Nov-89	PJ	
FINLDINI, MARY		RESIDENTIAL	WELLS	26-May-89	01-Nov-89	BW	
GRISWOLD, MIKE		RESIDENTIAL	WELLS	26-May-89	01-Nov-89	PJ	SUPER GOOD CENTS INFO
HYDE, MARGARET	HYDE TRAILER PARK	COMMERCIAL	WELLS	26-May-89	01-Nov-89	DK	
JUENKE, STEVE	THE PROGRESS	COMMERCIAL	WELLS	26-May-89	01-Nov-89	PJ	
KINER, ORIN		RESIDENTIAL	WELLS	26-May-89	01-Nov-89	DK	DISCUSSED RATES
KIMBER, KAREN		RESIDENTIAL	WELLS	26-May-89	01-Nov-89	PJ	
LARSEN, JACK		RESIDENTIAL	WELLS	26-May-89	01-Nov-89	BW	
LINDBERG, BILL		RESIDENTIAL	WELLS	26-May-89	01-Nov-89	DK	DISCUSSED RATES
MAES, LISA		RESIDENTIAL	WELLS	26-May-89	01-Nov-89	DK	
MCINTOSH, GEORGE		RESIDENTIAL	WELLS	26-May-89	01-Nov-99	PJ	
MOORE, BARY	SHARON MOTEL	COMMERCIAL	WELLS	26-May-89	01-Nov-89	DK	INQUIRY ABOUT SPPCO ENERGY PARK
NEFF, BERYL		RESIDENTIAL	WELLS	26-May-89	01-Nov-89	DK	
NIXON, STAN		RESIDENTIAL	WELLS	26-May-89	01-Nov-89	BW	
PE		RESIDENTIAL	WELLS	26-May-89	01-Nov-89	CF	
PE	BERT	RESIDENTIAL	CARLIN	26-May-89	01-Nov-89	WL	
PO	JIM	RESIDENTIAL	WELLS	26-May-89	01-Nov-89	CF	
RUSSELL, MIKE		RESIDENTIAL	WELLS	26-May-89	01-Nov-89	DK	
SAFFORD, STEVE		RESIDENTIAL	WELLS	26-May-89	01-Nov-89	WL	
SHARP, ALAN		RESIDENTIAL	WELLS	26-May-89	01-Nov-89	PJ	
SLADOWSKI, DAVE		IRRIGATION	WELLS	26-May-89	01-Nov-89	PJ	DISCUSSED IRRIG. PROGRAM
THOMPSON, K.C.		RESIDENTIAL	CARLIN	26-May-89	01-Nov-89	WL	
WOLSTEDT, STEVE	SEAMONT MINING	RESIDENTIAL	WELLS	26-May-89	01-Nov-89	CF	
WILLIAMS, JOE		COMMERCIAL	CARLIN	26-May-89	01-Nov-99	CF	
		RESIDENTIAL	WELLS	26-May-89	01-Nov-89	BW	

CHAPTER 49-03

ELECTRIC UTILITY FRANCHISE

49-03-01. Certificate of public convenience and necessity—Secured by electric public utility.—No electric public utility henceforth shall begin construction or operation of a public utility plant or system, or of an extension of a plant or system, except as provided below, without first obtaining from the commission a certificate that public convenience and necessity require or will require such construction and operation. This section does not require an electric public utility to secure a certificate for an extension within any municipality within which it has lawfully commenced operations. If any electric public utility in constructing or extending its line, plant, or system, unreasonably interferes with or is about to interfere unreasonably with the service or system of any other electric public utility, or any electric cooperative corporation, the commission, on complaint of the electric public utility or the electric cooperative corporation claiming to be injuriously affected, after notice and hearing as provided in this title, may order enforcement of this section with respect to the offending electric public utility and prescribe just and reasonable terms and conditions.

Source: S. L. 1927, ch. 235, § 1; 1929, ch. 198, § 1; R. C. 1943, § 49-0301; S. L. 1953, ch. 285, § 1; 1957 Supp., § 49-0301; S. L. 1959, ch. 342, § 1; 1965, ch. 319, § 1; 1977, ch. 440, § 1.

Cross-References.

Certificates of public convenience and necessity for other than electric utilities, see ch. 49-03.1.

Commission may require extension of electric lines to, into or through municipality, see § 49-20-10.

Electric supply lines generally, see ch. 49-20.

Electric transmission lines, see ch. 49-21.1.

Energy conversion and transmission facility siting, see ch. 49-22.

Judicial Review.

In an action concerning extension of power service by public utility, trial court improperly reversed decision of public service commission which denied applications for such extensions since commission's finding was supported by substantial evidence and under such conditions court has no power to reverse agency's decision. Application of Northern States Power Co., 171 NW 2d 751.

Prerequisites for Extension.

This section, as amended, requires that before a public utility shall be permitted to extend its lines into certain areas, it must show that public convenience and necessity reasonably requires such extension. Application of Otter Tail Power Co., 169 NW 2d 415.

Decisions under Prior Law.

Contiguous territory, extension into which required no certificate, was territory touching, adjoining, and connected, as distinguished from territory separated by other territory. Williams Elec. Coop. v. Montana-Dakota Util. Co., 79 NW2d 508.

Territory not receiving similar service from another utility, or electric cooperative corporation, extension into which required no certificate, had reference to service in fact as distinguished from ability to give service. Williams Elec. Coop. v. Montana-Dakota Util. Co., 79 NW2d 508.

Territory "already served" by a public utility included territory within a reasonable distance of its existing distribution lines or stations; what was a reasonable distance depended upon the circumstances of the case. Cass County Elec. Coop. v. Otter Tail Power Co., 93 NW 2d 47.

Because common pipeline carriers were "public utilities" within the meaning of section 49-01-01(3), this chapter was specifically applicable to them. Eckre v. Public Service Comm., 247 NW 2d 656, decided prior to 1977 amendment of section 49-03-01.

Collateral References.

Public Service Commissions⇐6.3-6.7.

64 Am. Jur. 2d, Public Utilities, § 237.

73 C. J. S. Public Utilities, §§ 2, 42, 44, 47.

Law Review.

Interstate Public Use: An Issue Occurring in Condemnation for Interstate Power Lines, 52 N. D. L. Rev. 563.

49-03-01.1. **Limitation on electric transmission and distribution lines, extensions and service by electric public utilities.**—No electric public utility henceforth shall begin in the construction or operation of a public utility plant or system or extension thereof without first obtaining from the commission a certificate that public convenience and necessity require or will require such construction and operation, nor shall such public utility henceforth extend its electric transmission or distribution lines beyond or outside of the corporate limits of any municipality, nor shall it serve any customer where the place to be served is not located within the corporate limits of a municipality, unless and until, after application, such electric public utility has obtained an order from the commission authorizing such extension and service and a certificate that public convenience and necessity require that permission be given to extend such lines and to serve such customer.

Source: S. L. 1965, ch. 319, § 2.

Burden of Proof.

The public utility has the burden of proving that public convenience and necessity requires or will require the extension of its lines as prayed for in its application. Tri-County Elec. Cooperative, Inc. v. Elkin, 224 NW 2d 785.

Customer Preference.

Customer preference is not to be a controlling factor in determining extensions of service by public utilities, but rather the public convenience and necessity should be the paramount concern of the commission. Tri-County Elec. Cooperative, Inc. v. Elkin, 224 NW 2d 785.

Weight of Evidence.

Where the factors of customer preference, location of the lines, reliability of service, economic return, and wasteful duplication favored the cooperative, or favored neither the utility nor the cooperative, there was no weight of evidence to justify the commission's conclusion that the public convenience and necessity required issuance of a certificate. Tri-County Elec. Cooperative, Inc. v. Elkin, 224 NW 2d 785.

49-03-01.2. Unconstitutional.

Note.

This section, providing for consent by nearest electric cooperative to extension of service to rural area by electric public utility, was held invalid as an unlawful delegation of legislative authority in violation of Const. § 25. Montana-Dakota Utilities Co. v. Johanneson, 153 NW 2d 414, commented on in 224 NW 2d 785, 794.

49-03-01.3. Exclusions from limitations on electric distribution lines, extension and service and on issuance of certificates of public convenience and necessity. Sections 49-03-01 through 49-03-01.5 shall not be construed to require any such electric public utility to secure such order or certificate for an extension of its electric distribution lines within the corporate limits of any municipality within which it has lawfully commenced operations; provided, however, that such extension or extensions shall not interfere with existing services provided by a rural electric cooperative or another electric public utility within such municipality; and provided duplication of services is not deemed unreasonable by the commission.

Sections 49-03-01 through 49-03-01.5 shall not be construed to require an electric public utility to discontinue service to customers thereof whose places receiving service are located outside the corporate limits of a municipality on July 1, 1965; provided, however, that within ninety days after July 1, 1965, any electric public utility furnishing service to customers whose places receiving service are located outside the corporate limits of a municipality shall file with the commission a complete map or maps of its electric distribution system showing all places in North Dakota which are located outside the corporate limits of a municipality and which are receiving its service as of July 1, 1965. After ninety days from July 1, 1965, unless a customer whose place being served is located outside the corporate limits of a municipality is shown on said map or maps, it shall be conclusively presumed that such customer was not being served on July 1, 1965, and cannot be served until after compliance with the provisions of section 49-03-01.1.

CHAPTER 49-03.1

UTILITY FRANCHISE FOR OTHER THAN ELECTRIC UTILITIES AND CARRIERS FOR HIRE

Section
49-03.1-02. Definitions.

49-03.1-02. Definitions. In this chapter, unless the context or subject matter otherwise requires:

1. "Commission" means the public service commission.
2. "Public utility" includes any association, person, firm, corporation, or agency engaged or employed in this state to furnish its product or services to the public generally which is statutorily subject to the jurisdiction of the commission. The words "public utility" as used in this chapter shall not apply to electric public utilities or motor carriers of persons or property for hire.

Source: S. L. 1965, ch. 319, § 4.

***Note.**

Section 49-03-01.2, cited above, was held unconstitutional; the section was severable so that the remainder of the act was not rendered invalid.

Cross-Reference.

Commission may require extension of electric lines to, into or through municipality, see § 49-20-10.

49-03-01.4. Enforcement of act.—If any electric public utility violates or threatens to violate any of the provisions of sections 49-03-01 through 49-03-01.5 or interferes with or threatens to interfere with the service or system of any other electric public utility or rural electric cooperative, the commission, after complaint, notice, and hearing as provided in chapter 28-32, shall make its order restraining and enjoining said electric public utility from constructing or extending its interfering lines, plant or system. In addition to the restraint imposed, the commission shall prescribe such terms and conditions as it shall deem reasonable and proper.

Provided, further, that nothing herein contained shall be construed to prohibit or limit any person, who has been injured in his business or property by reason of a violation of sections 49-03-01 through 49-03-01.5 by any electric public utility or electric cooperative corporation, from bringing an action for damages in any district court of this state to recover such damages.

Source: S. L. 1965, ch. 319, § 5.

49-03-01.5. Definitions.—As used in sections 49-03-01 through 49-03-01.5:

1. "Electric public utility" shall mean a privately owned supplier of electricity offering to supply or supplying electricity to the general public.
2. "Rural electric cooperative" shall include any electric cooperative organized under chapter 10-13. An electric cooperative, composed of members as prescribed by law, shall not be deemed to be an electric public utility.
3. "Person" shall include an individual, an electric public utility, a corporation, an association, or a rural electric cooperative.

49-03-02. Prerequisites to issuance of certificate of public convenience and necessity.—Before any certificate may issue under this chapter, a certified copy of the articles of incorporation or charter of the utility, if the applicant is a corporation, shall be filed with the commission. At the hearing of said application upon notice as provided in this title, the utility shall submit evidence showing that such applicant has received the consent, franchise, permit, ordinance, or other authority of the proper municipality or other public authority, if required, or has or is about to make application therefor. The commission shall have the power, after notice and hearing, to:

1. Issue the certificate prayed for;
2. Refuse to issue such certificate;
3. Issue it for the construction or operation of a portion only of the contemplated facility, line, plant, system, or extension thereof; or
4. Issue it for the partial exercise of the right or privilege sought, conditioned upon the applicant's having secured or upon his securing the consent, franchise, permit, ordinance, or other authority of the proper municipality or other public authority, and may attach to the exercise of the rights granted by any certificate such terms and conditions as in its judgment the public convenience and necessity may require.

Notwithstanding any of the foregoing provisions, the commission may grant a certificate if no interested party, including any local electric cooperative, has requested a hearing on said application after receiving at least twenty days' notice of opportunity to request such hearing.

Source: S. L. 1927, ch. 235, § 3; 1929, ch. 198, § 4; R. C. 1943, § 49-0302; S. L. 1971, ch. 458, § 1.

Conditional Order.

The public service commission has no power to order the issuance of a certificate of public convenience and necessity conditioned upon prior receipt of a written consent to comply with a rate schedule ordered by the commission. Public Service Commission v. Montana-Dakota Util. Co., 100 NW 2d 140.

49-03-03. Franchise not to be exercised without certificate.—No public utility henceforth shall exercise any right or privilege under any franchise or certificate hereafter granted, or under any franchise or certificate heretofore granted, the exercise of which has been suspended or discontinued for more than one year, without first obtaining from the commission a certificate that public convenience and necessity require the exercise of such right or privilege.

Source: S. L. 1927, ch. 235, § 2; 1929, ch. 198, § 2; R. C. 1943, § 49-0303.

Retroactivity of Statute.

The statute requiring a certificate from the public service commission of public convenience and necessity does not apply to a public utility granted a franchise by a city within a year before the effective date of the statute. Olson v. Erickson, 56 ND 468, 217 NW 841.

Collateral References.

Electricity⇐4.

26 Am. Jur. 2d, Electricity, Gas, and Steam, § 10.

29 C. J. S. Electricity, § 12b(2).

49-03-04. Replacement or renewal of franchise—Certificate of public convenience and necessity not necessary.—No public utility need secure a renewal certificate of public convenience and necessity under this chapter in order to exercise rights under an ordinance hereafter granted where it has not suspended operation of its plant and where such franchise merely replaces or renews an expiring or expired franchise.

Source: S. L. 1929, ch. 198, § 3; R. C. 1943, § 49-0304.

49-03-05. Complaint upon violation of chapter.—Whenever a public utility engages or is about to engage in construction or operation as described in this chapter without having secured a certificate of public convenience and necessity as required by the provisions of this chapter, or whenever a public utility constructs or extends its line, plant, or system, or supplies, or offers to supply electric service in violation of this chapter, any interested municipality, public authority, utility, electric cooperative corporation, or person, may file a complaint with the commission. The commission thereupon, or upon its own motion without complaint, with or without notice, may make its order requiring the public utility complained of to cease and desist from such construction or operation or other prohibited activity until the further order of the commission. Upon hearing had after due notice given, the commission shall make such order with respect to such public utility and prescribe such terms and conditions as are just and reasonable.

Source: S. L. 1927, ch. 235, § 3; 1929, ch. 198, § 4; R. C. 1943, § 49-0305; S. L. 1953, ch. 285, § 2; 1957 Supp., § 49-0305.

Auditing -

A Management Tool

by

Tony F. Wilson - Auditor

Cobb Electric Membership Corporation

Presented to :

the Rural Electric Management Developement Council

May 15, 1989

Fargo , North Dakota

Speaking Outline -

1. How to Get Started.

2. Developement and Approval.

3. The Format.

4. Performing the Audit.

5. Reporting the results.

6. Modifying the Procedure.

7. Where to from here?

How to Get Started.

It has to come from the top.

Consult REA bulletins, books and other sources.

Use experience and observations.

Develope a list of audit areas.

Get approval of the list.

Make sure everyone knows what's going on.

Developement and Approval

Outline purpose behind audits.

Research and observe.

Put it in writing.

Have the employees involved review for accuracy.

Approve at the top.

Make copies and pass out.

The Format.

The Procedure.

Employees Primarily Responsible.

Workpapers.

Performing the Audit.

Monthly, Quarterly, and Annual Audits

Random Selection.

Consider Work Schedule.

Cash Audits - Surprise Basis.

Evaluate and Expand the Audit When Appropriate.

Remember that the audit is a snapshot.

Reporting the Results.

How Often are the Results Reported?

Who gets them?

Who keeps the Original and Who gets a Copy?

How do you Handle a Problem?

Keep the Reports in a Secure Place.

Does your Independent Auditor want Copies?

How Long should you Keep the Audit Reports?

Modifying the Procedure

Have a Schedule.

Consult Management and your Independent Auditors.

Keep Track of your Revisions.

Make sure that Everyone gets a new Copy.

Where to From Here?

Have a Backup to your Auditor.

Professional Organizations.

Comprehensive Audits vs. Snapshots.

What Results do you Expect?

Let Everyone Know What is Going on.

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Developed - October, 1986
1st Revision - March, 1987
2nd Revision - May, 1988

COBB EMC PROCEDURE

Title- Internal Auditing
Affects - Entire Cooperative
Reviewed By - President/CEO and Division Vice Presidents

Objective - To establish effective guidelines and controls to accomplish the following on a cooperative wide basis.

1. Safeguard assets with an established plan of organization and procedure.

2. To assure accuracy in accounting and operational data.

3. To promote efficiency of operation.

4. Encourage adherence to management policy.

Responsibility - The President/Chief Executive Officer is accountable for the overall success of this procedure. The Division Vice President - Financial Services is charged with the primary responsibility of control. Other division Vice Presidents are responsible for that part of the procedure that occurs within their division.

Control - The areas within Cobb EMC subject to internal auditing will be set-up in the following manner:

1. Operation - A description of the function is made.

2. Custodianship - Those employees primarily involved with the function are listed.

3. Reporting - The work papers used to audit the function are outlined.

Work papers will be retained by the employee performing the audit. The work paper file will be made available to the corporation's auditors if they wish to use it. Problems encountered during an audit will be reported in writing to the division Vice President of the section involved, the President/CEO and the division Vice President - Financial Services.

INTERNAL AUDIT SCHEDULE

AREA	SCHEDULE
1	Quarterly
2	Quarterly
3	Quarterly
4	Monthly
5	Annually
6	Quarterly
7	Quarterly
8	Quarterly
9	Monthly
10	Quarterly
11	Annually
12	Quarterly
13	Quarterly
14	Quarterly
15	Quarterly
16	Quarterly
17	Quarterly
18	Quarterly
19	Quarterly
20	Quarterly
21	Monthly
22	Quarterly
23	Quarterly
24	Monthly

RESOURCES USED

1. Auditing Second Edition by Joseph A. Silvoso and Royal D. M. Bauer.

2. Office Management and Control Seventh Edition by George R. Terry., PH.D.

3. Auditing Theory and Practice First Edition by Roger H. Hermanson, Stephen E. Loeb, John M. Saada and Robert H. Strawser.

4. Management Control Systems Fifth Edition by Robert N. Anthony, John Dearden and Norton M. Bedford.

5. REA Bulletin 182-1, Evaluation and Enforcement of Internal Control of Borrower's Enterprises. January 10, 1965.

6. The knowledge and patience of the many employees at Cobb EMC.

AREA 6
INTERNAL AUDIT FOR
COLLECTION ON INACTIVE ELECTRIC ACCOUNTS

Operation

When a member discontinues using our service their billing record is closed and a final bill for electric usage is produced. Most ex-members will pay this amount promptly.

However, some individuals need prompting to pay the debt owed. The following is a brief outline of the collection efforts used. (In house and collection agency.)

1. When a meter is disconnected at a location, a final reading is taken and entered into the billing record. Because of this final reading the cycle on the account changes to 99 and a final bill is produced at the next billing.
2. Accounts that are disconnected for non-payment do not have an off reading entered until approximately 30 days later. This allows the member a chance to pay the amounts owed and come back onto the system before his record is closed.
3. Fifteen (15) days after the off date a "polite" reminder letter is mailed by the Senior Collections Clerk to the member asking for payment.
4. Forty five (45) days after the off date a certified letter is mailed to members with debt over $50. This letter allows ten (10) days before further legal action is taken. At approximately the 70-90 days after disconnect the debt is turned over to the collection agency or the Cooperative's attorney for collection.

5. Only those accounts over $20 will be sent to the collection agency. Accounts with a balance under $20 are filed as all collection efforts exhausted.
6. The Senior Collections Clerk may hold out some accounts from the collection agency for further in house efforts.
7. In certain circumstances debt may be moved to another active account in the member's name. Service may be denied to individuals or businesses that refuse to pay balances owed on other inactive accounts. Efforts are coordinated with the Customer Service Department in this regard.
8. The collection agency sends a listing of accounts accepted that are verified by the collection clerk for accuracy. The agency will also send close and return reports on those accounts that they feel further collection efforts will be fruitless.
9. If the circumstances dictate, Cobb EMC or the collection agency may file suit against individual in an attempt to collect amounts owed. The Division Vice President - Member and Employee Relations is able to authorize such suits. The President/CEO will be advised of such action.

Custodianship

Those employees primarily responsible for activity in this area are:

Department Manager - Collections and Meter Reading

Collections Supervisor

Senior Collections Clerk

Collections Clerk (Clerk II)

Cashier/Collection Clerk (Clerk I)

COBB EMC INTERNAL AUIDIT - WORK PAPERS
COLLECTIONS ON INACTIVE ELECTRIC ACCOUNTS

Date Audited _____ By _____

Account Audited _____

Ex-Member's Name _____

Service Address _____

Map Location _____ Cycle _____

Date of Disconnect _____

Date of Final Bill _____

Date of 15 Day Letter _____

Date of 45 Day Letter _____

Date Turned over to Collection Agency _____

Verification of Acceptance by Agency _____

Remarks _____

_____

_____

_____

Elaine J. Garry, Staff Assistant
Sioux Valley Empire Electric
Association

SIOUX VALLEY ELECTRIC'S CURRENT RATE DESIGN

-Non-Traditional

-Follows a cost-of-service methodology

-First implemented by Leland Olds in mid 1950's

-Refined by Roland Kampmeier, Rate Consultant, formerly with TVA

-Overriding influence is Equity

-Four-Step Approach to Development of Rate

1) Determine the number of consumers in each rate classification and their KWH use.

2) Allocate co-op's total investments to each classification of service.

3) Assign annual costs.

4) Allocate costs to each use rate classification.

-Result is a declining block rate design

-Sioux Valley Electric reads all customer's meters

KEY CRITERIA IN NEW INCREMENTAL RATE DEVELOPMENT

1. Must achieved without raising rates.

2. Must treat all consumers fairly.

3. "Price signal" must be easily recognized by the consumer.

4. Must carry appropriate share of revenue requirements.

BASELINE USE

A month by month historic use for each individual consumer.

INCREMENTAL RATE

-Rate applicable to all future or added KWH use.

-Rate that covers the costs associated with moving from one level of KWH use to another level.

-3.9¢ per KWH for urban-residential.

-4.5¢ per KWH for rural-residential.

CONSUMER WITH 1500 KWH BASELINE

Monthly KWH	Present Rate	Proposed Rate
1500	$109.00	$109.00
2000	$140.25	$129.00

CONSUMER WITH 1500 KWH BASELINE

Monthly KWH	Present Rate	Proposed Rate
1000	$ 75.25	$ 89.00
1500	$109.00	$109.00
2000	$140.25	$129.00

KWH USE

EXHIBIT #4

30 RESIDENTIAL ACCOUNTS
4 FULL YEARS OF HISTORY 85-88
(STUDYRAU)

	1985	1986	1987	1988 **	Baseline 4 YEAR AVG
JANUARY	49,190	56,070	42,540	56,200 **	170(
FEBRUARY	58,000	50,890	36,320	57,980 **	169:
MARCH	44,980	44,750	38,470	48,410 **	1472
APRIL	35,490	39,600	37,870	39,500 **	127)
MAY	28,140	32,050	28,930	27,770 **	97'
JUNE	25,600	28,180	28,450	27,190 **	912
JULY	26,550	26,370	30,630	32,600 **	968
AUGUST	28,890	45,810	40,170	33,840 **	123:
SEPTEMBER	27,590	25,630	27,490	30,180 **	92'
OCTOBER	27,780	26,310	22,890	21,810 **	823
NOVEMBER	30,450	33,540	31,840	29,320 **	104?
DECEMBER	52,320	43,710	40,870	35,350 **	143
	434,980	452,910	406,470	440,150 **	
AVERAGE USE	1,208	1,258	1,129	1,223 **	1,205
% OF BASELINE	100	104.4	94	101.5 **	

6%

EXHIBIT #19

4-YEAR AVERAGE FARM AND RURAL RESIDENTIAL (43) SUMMARY (b4-yrsum)

PRESENT RATE	1985	1986	1987	1988	TOTAL
ANUARY	7,766.85	9,646.76	7,523.80	8,240.02	33,177.43
EBRUARY	8,667.38	8,292.97	7,973.99	8,292.47	33,166.81
MARCH	6,527.75	7,494.72	6,365.95	7,435.16	27,823.59
PRIL	5,418.61	6,228.85	6,655.85	6,776.09	25,079.40
AY	4,233.71	5,066.91	4,277.94	4,965.89	18,544.45
JUNE	4,142.03	4,445.62	4,608.10	4,665.77	17,861.52
ULY	3,989.31	4,578.84	4,444.86	4,906.24	17,919.25
UGUST	4,139.06	4,867.03	5,337.25	5,102.06	19,445.40
EPTEMBER	3,843.15	4,387.82	4,557.67	4,972.84	17,761.48
CTOBER	4,207.73	4,714.05	4,664.09	4,649.66	18,235.53
OVEMBER	6,384.61	7,135.13	6,322.34	5,831.61	25,673.69
ECEMBER	7,824.38	8,220.31	6,258.80	6,509.16	28,812.65
	67,084.58	75,079.01	68,990.64	72,346.97	283,501.20

NEW RATE	1985	1986	1987	1988	TOTAL
ANUARY	7,983.92	9,091.92	7,844.32	8,257.12	33,177.28
EBRUARY	8,483.97	8,294.37	8,109.97	8,294.77	33,183.08
ARCH	6,711.01	7,271.81	6,615.81	7,240.61	27,839.24
PRIL	5,779.23	6,251.23	6,496.03	6,573.23	25,099.72
AY	4,403.40	4,885.80	4,435.40	4,832.20	18,556.80
UNE	4,290.70	4,458.30	4,552.70	4,583.90	17,885.60
ULY	4,201.58	4,539.98	4,461.98	4,721.18	17,924.72
UGUST	4,452.80	4,861.60	5,131.20	4,998.40	19,444.00
EPTEMBER	4,105.66	4,406.86	4,504.46	4,746.46	17,763.44
CTOBER	4,358.39	4,646.39	4,621.59	4,615.59	18,241.96
OVEMBER	6,412.01	6,844.01	6,359.61	6,081.61	25,697.24
ECEMBER	7,567.52	7,809.52	6,653.12	6,804.32	28,834.48
	68,750.19	75,361.79	69,786.19	71,749.39	283,647.56

IFFERENCE					
ANUARY	217.07	-554.84	320.52	17.10	-0.15
EBRUARY	-123.41	1.40	135.98	2.30	16.27
ARCH	183.25	-383.91	249.86	-194.55	15.65
PRIL	360.62	22.38	-159.82	-202.86	20.32
AY	169.69	-181.11	157.46	-133.69	12.35
UNE	148.67	12.68	-55.40	-81.87	24.08
ULY	212.27	-38.86	17.12	-185.06	5.47
UGUST	313.74	-5.43	-205.05	-103.66	-1.40
EPTEMBER	262.51	19.04	-53.21	-226.38	1.96
CTOBER	150.66	-67.66	-42.50	-34.07	6.43
OVEMBER	27.40	-291.12	37.27	250.00	23.55
ECEMBER	-256.86	-410.79	394.32	295.16	21.83
	1,665.61	-1,717.22	795.55	-597.58	146.36

AVERAGE USE (% OF BASELINE)	94	106.8	97	102.3	

SAMPLE ELECTRIC BILL

SERVICE ADDRESS:	Albertha Vanroekel Route 2 Madison, SD 57042	**METER NO:**	2410102.00
		BILLING DATE:	12/15/87 to 1/15/88
LOCATION NO:	043-0-06-01-0	**RATE SCHEDULE:**	Town Residential

ELECTRIC BILL

KWH USED THIS BILLING PERIOD:	3500 KWH
BASELINE KWH USE (4 YR. AVE.):	2720 KWH

BILL FOR BASELINE USE:

50 KWH AT $0.14	$ 7.00
50 KWH AT $0.09	4.50
400 KWH AT $0.075	30.00
1000 KWH AT $0.0675	67.50
1220 KWH AT $0.0625	76.25
SUBTOTAL:	$185.25

ADJUSTMENT FOR ACTUAL USE (ADD):

3500 KWH - 2720 KWH = 780 KWH AT $0.04	$ 31.20

TOTAL BILL: $216.45

(Bill under the current rate structure for 3130 KWH = $234.00.)

SAMPLE ELECTRIC BILL

SERVICE ADDRESS:	Albertha Vanroekel Route 2 Madison, SD 57042	**METER NO:**	2410102.00
		BILLING DATE:	11/15/88 TO 12/15/88
LOCATION NO:	043-0-06-01-0	**RATE SCHEDULE:**	Town Residential

ELECTRIC BILL

KWH USED THIS BILLING PERIOD: 1200 KWH

BASELINE KWH USE (4 YR. AVE.): 2070 KWH

BILL FOR BASELINE USE:

50 KWH AT $0.14	$ 7.00
50 KWH AT $0.09	4.50
400 KWH AT $0.075	30.00
1000 KWH AT $0.0675	67.50
570 KWH AT $0.0625	35.63
SUBTOTAL:	$144.63

ADJUSTMENT FOR ACTUAL USE (SUBTRACT):

2070 KWH - 1200 KWH = 870 KWH AT $0.04	($ 34.80)

TOTAL BILL: $109.83

(Bill under the current rate structure for 1200 KWH = $ 88.75.)

ADVANTAGES

OF

INCREMENTAL RATE DESIGN

1. Will promote additional sales by sending a more competitive "price" signal for additional use.

2. Assures that costs are covered at all levels of additional use.

3. Requires no load control or service interruption.

4. Solves revenue attrition due to decreased sales.

DISADVANTAGES

OF

INCREMENTAL RATE DESIGN

1) Challenge to identify a valid baseline.

2) Consumer's situation may change from time to time.

3) As time goes on, the "baseline" becomes less relevant.

4) Appropriate Baseline must be established for new consumers.

FURTHER STUDY

Develop test groups

- -100 Farm & Rural Residential
- -100 Town-Residential

Survey participants extensively

- -family size
- -house size
- -appliances
- -work and free time habits
- -business operations

Market special products with the incremental rate and document results

Redesign our monthly electric bill to provide consumer with more and better information

Jim Kiley, General Manager
Sioux Valley Empire Electric
Association

T H E S C E N E

-SIOUX VALLEY--DISTRIBUTION CO-OP
SOUTHEASTERN SOUTH DAKOTA

-TWO-TIERED G & T SET UP

-Basin Electric

-East River Electric

-POWER SOURCE

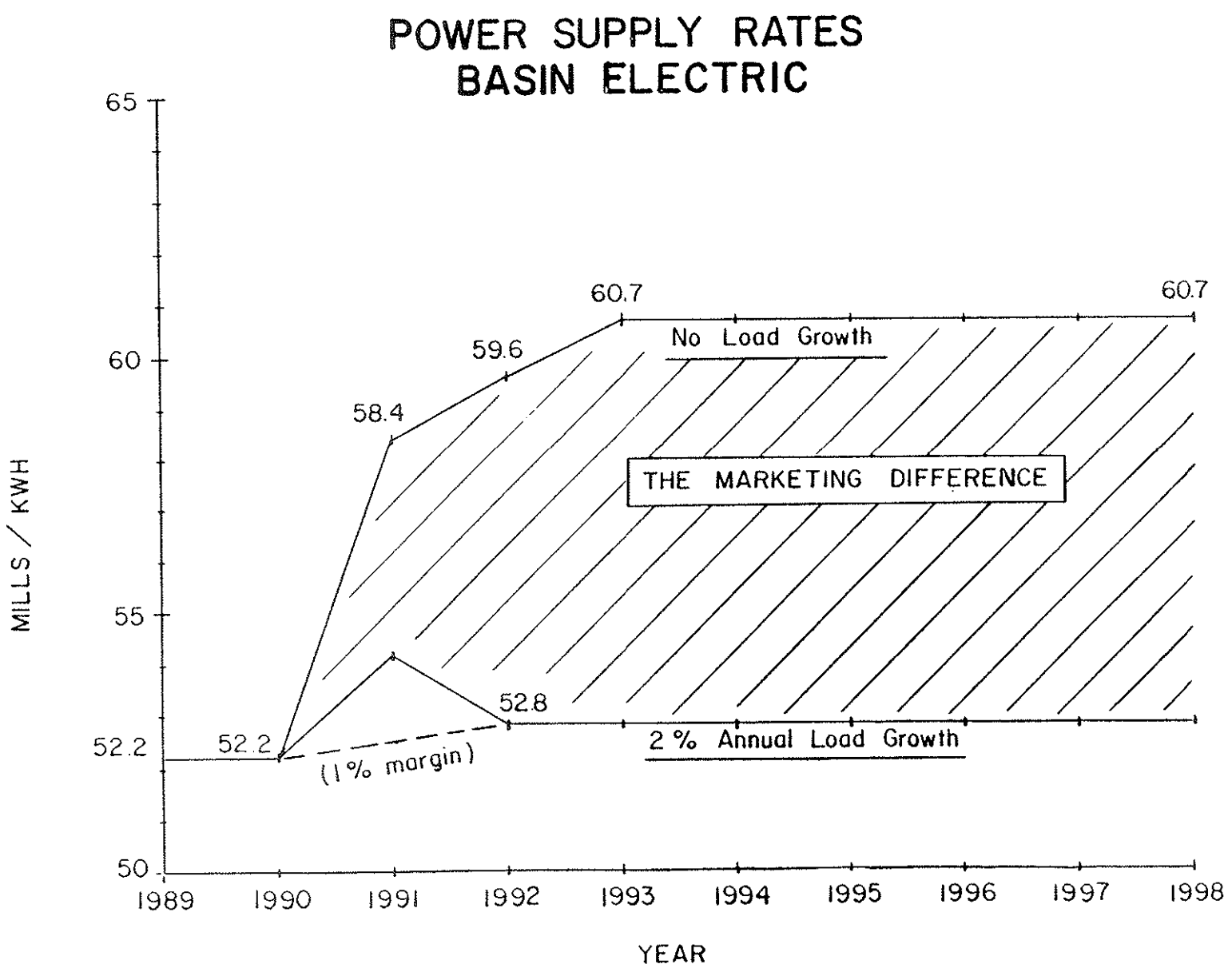
-Basin--2 Million KW Capacity
Coal Fired Plants

-1 Million KW Surplus

-East River

-50% Missouri River Hydro

-50% Basin


POWER SUPPLY RATES
BASIN ELECTRIC
65
60
55
52.2
50
MILLS / KWH
60.7
60.7
59.6
58.4
No Load Growth
THE MARKETING DIFFERENCE
52.8
52.2
(1% margin)
2% Annual Load Growth
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
YEAR

T H E R A T E S I T U A T I O N

Basin Selling Price	52 Mills
Hydro Selling Price	7 Mills
East River Blended Selling Price	42.5 Mills
Sioux Valley Selling Price	7.0¢

THE IMPACT OF

SURPLUS GENERATING CAPACITY

BASIN SELLING PRICE

At 50% Capacity	52 Mills
At 100% Capacity	35 Mills

Pricing Strategically

Incremental Price = Incremental Cost

Surplus → Low Incremental Cost → Low Price

Shortage → High Incremental Cost → High Price

THE FIXED CHARGE COMPONENT

FIXED COSTS

-Depreciation

-Interest

-Taxes

-Operations & Maintenance

CONCEPT

Assess each member their proportionate share of the Fixed Costs associated with Basin's Surplus

Fixed Charge Determination

* Identify fixed costs associated with Basin Electric surplus capacity

$100 million

* Access a portion of these costs as a fixed charge

Approximately $60 million

Basin Electric
Existing Rate Structure

Member Revenue Requirement

44%

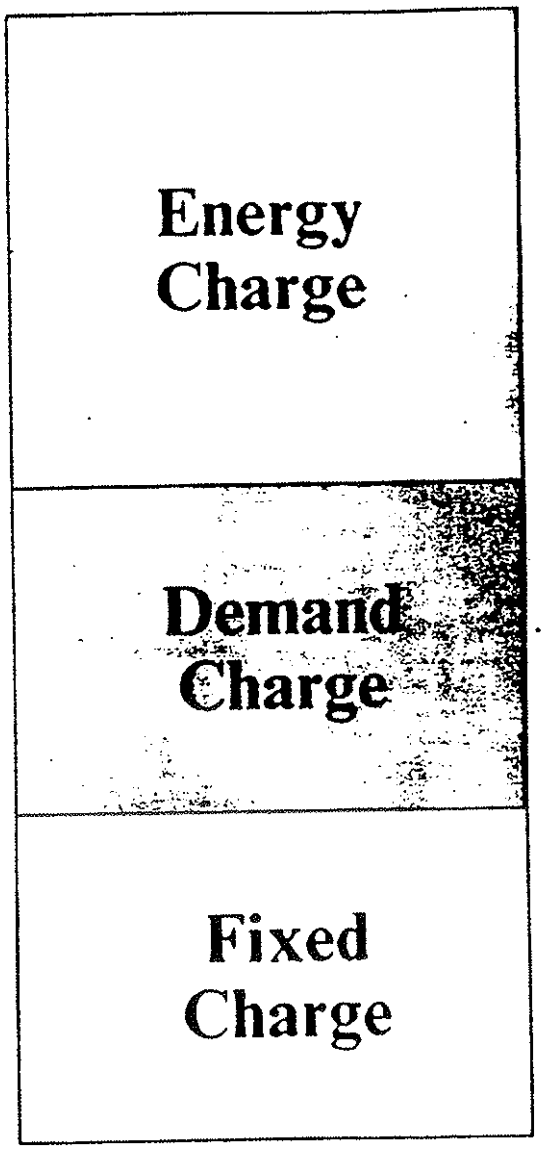
Energy
Charge

56%

Demand
Charge

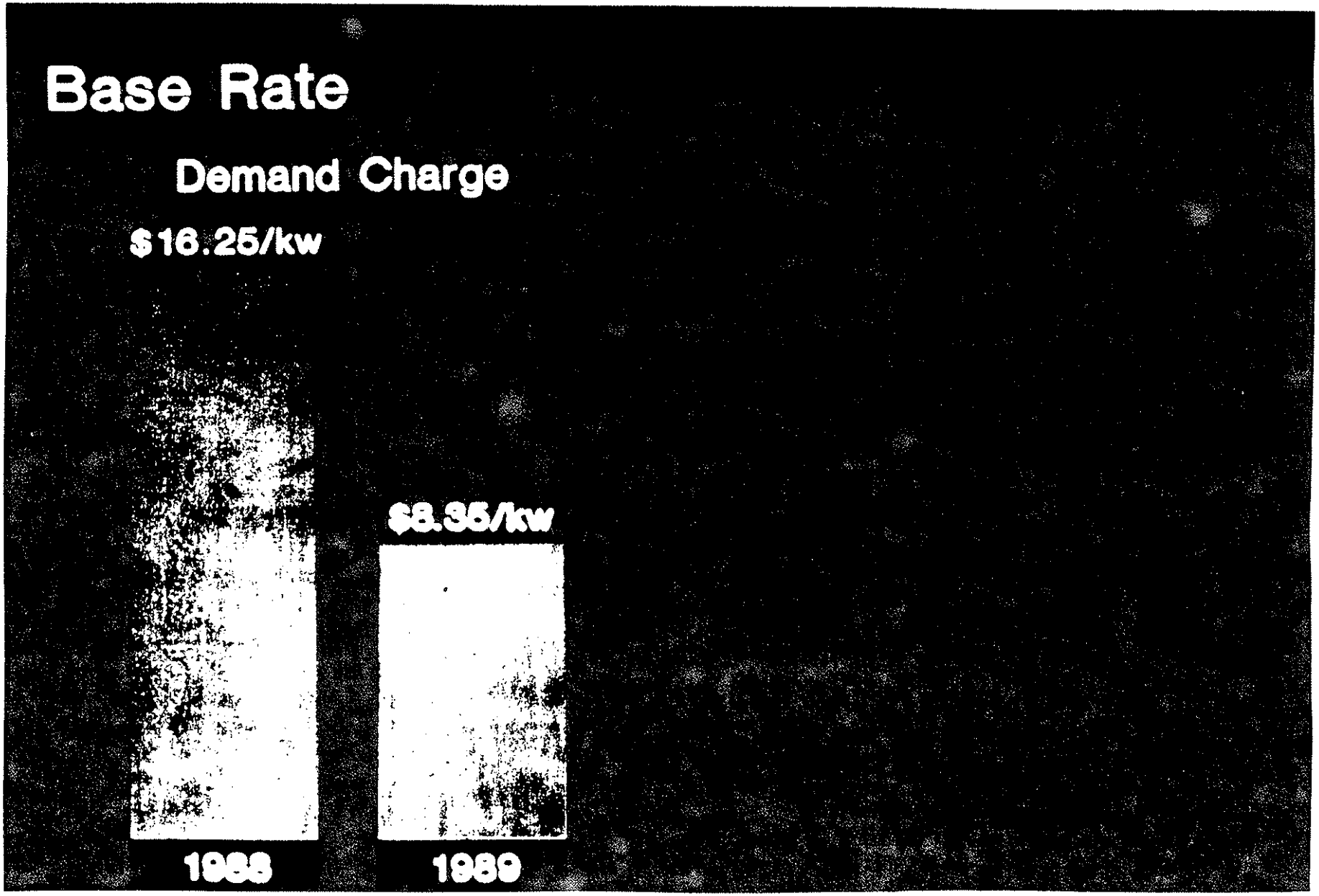
THREE TIER

RATE STRUCTURE

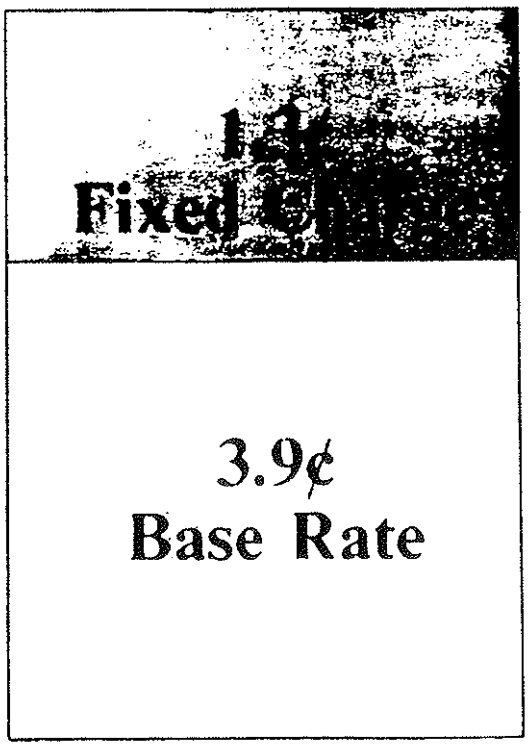


Approx. 44%

Approx. 56%


Base Rate
Demand Charge
$16.25/kw
$8.35/kw
1988
1989

FIXED CHARGE CREATES A NATURAL FOLLOW-ON EFFECT OR MARKETING INCENTIVE



1988 VS. 1989 WHOLESALE RATE

Rate Component	1988	1989
Demand	$11.55/KW	$6.50/KW
Energy	18.4 mills/KWH	16.2 mills/KWH
Discount Energy	14.5 mills/KWH	Discontinued
Substation Charges:		
Capacity	$3.40/KW yr.	$3.90/KW yr.
Substation	$810/sub/mo.	$900/sub/mo.
* Fixed Charge	----	$15.5 million

* Annually allocated based on most current two-year purchases of energy, kilowatt months and seasonal peak contributions by member system

EAST RIVER

INCREMENTAL SELLING PRICE

Blended Rate	42.5 Mills
Less: Fixed Charge	13.5 Mills
Incremental Rate	29.0 Mills

Allen Ritchie, Manager
Administrative Services
Shenandoah Valley EC, Virginia

IDEA SHARE/SHOP TALK
RATES/MEMBERS/DRUG FREE WORKPLACE

- George Weaver, Central Georgia EMC: Members are given the opportunity to make a contribution to ACRE. Once a year, $1.00 is added to the member's bill. When member does not want to participate, he deducts the $1.00. There is advance publicity that it is strictly voluntary. Some people are willing to give more. This action has been approved by their attorney and the Board is in full agreement. Central Georgia then writes a corporate check for the full amount. (It was pointed out that ACRE could not accept corporate checks (must be personal checks) but Mr. Weaver said their check had always been accepted.

- Allen Ritchie, Shanandoah Valley EC, discussed a proposed rule relative to REA loan audits. Would have to do with transferring of audits to independent auditors/CPAs that cooperative's have. Having independent auditors can cause problems. The only recourse is political - Congressmen should be urged to oppose this ruling. The field accountant would end up having to audit the independent auditors. The Office of Inspector General has already ruled on this.

- The executive order on a drug-free work place was discussed. Sioux Valley has adopted a policy as well as several other cooperatives. Drug testing is not required in the policy. One co-op does pre-employment drug testing. It was pointed out Federated Insurance will not insure a person if he does not have driver's license (no license, no job). Flint EMC reported if job requires a valid driver's license and the employee loses his license for whatever reason, he in turn will lose his job.

- There was discussion concerning Employee Assistance Programs. Most cooperatives have some type of program. This can do much to help with a drug free work place.

- Section 89 Requirements (employee benefits) discussed. Bill to repeal has been signed by 200 house representatives. NRECA says will not be repealed. May be subjected to IRS audits. Will be looking at compensation, discrimination, etc. All must be thoroughly documented.

- There was discussion concerning importance of Board of Directors reviewing cooperative bylaws on at least an annual basis. Bylaws must reflect how the cooperative is operating.

- Allen Ritchie - discussed national trend in health care costs. His cooperative had 49% increase in major medical/hospital insurance for employees. Worked with consultant who did a review of major medical/life insurance. NRECA was one of the best. Recommended certain changes to the program. Stressed communicating to employees the value of this benefit. Similar increases will continue because of national trends.

- Some director expenses are greater than employees because of age. Roger Geckler stated his cooperative had the same experience. Also discussed how to handle single vs family coverage. Several cooperatives had flex plans.

Idea Share/Shop Talk (Continued)

- The importance of disaster recovery planning was discussed and what to do in such a situation. Were reminded of the fire at NRECA and the time involved in reconstructing documents.

- Allen Ritchie stated his cooperative moving into new headquarters facilities. Present facility will be used for district operations. An interior design consultant was used and employees given opportunity for input (colors, fabrics, etc.)

- Margin stabilization plan discussed. Deferral of revenues can affect tax status. G&T cooperatives not regulated same way as distribution cooperatives.

- Don Van Deest, Central Wisconsin Electric Co-op, stated in order to get better attendance at their annual meeting and in celebration of their 50th anniversary, they awarded one month's free electricity bill to 50 members (drew names out of hat). They have done this two years in a row and attendance has doubled. Those who attended the meeting the previous year will have name in pot twice this year.)

E D U C A T I O N A L P R I O R I T I E S

LAYTON A. WHEELER
MANAGER, MEMBER & STAFF SERVICES
DELAWARE ELECTRIC COOPERATIVE
GREENWOOD, DELAWARE

1989 REMDC ANNUAL CONFERENCE
MAY 14-17, 1989
HOLIDAY INN
FARGO, NORTH DAKOTA

ITEMS FOR DISCUSSION

Should we be concerned?

Do we have a problem?

Should we establish priorities and goals to motivate our students to realize their potential? Briefly, our preamble should be one of seeking to enhance each school's ability to encourage all students to "prepare for their future."

We can discuss ways to better communicate with our young people regarding their entry into the employment arena.

What happens to the 49 percent of our graduates who do not further their education?

Money-what is it? What does it mean to our young people?
Pilot Program?

Name Committee

Resumes

Do's/Don't's of Interviewing

Use of plastic-credit-money

Testing for Drugs/DUI

Opportunities for Employment

Career Goals: One Year - Five Years - Ten Years

Priorities

What is our Audience?

Positive rather than Negative

Awareness

Involvement/Political/School/Local/State/National

Attitude/Self Awareness/Appearance

Pride

It seems that today everybody wants to start at the top and work down

Our students need career direction

Channel our students' capabilities into the mainstream

The students of today-the leaders of tomorrow-how will they know?

SUMMARY

AMERICA IN PERSPECTIVE

THREE AMERICAN CORPORATIONS - AMERICAN EXPRESS, BRISTOL-MYERS AND THE SUN OIL COMPANY COMMISSIONED AN OXFORD UNIVERSITY STUDY IN 1986 TO PROJECT THE SOCIAL, ECONOMIC, POLITICAL, FISCAL AND PSYCHOLOGICAL TRENDS LIKELY TO IMPACT OUR ENVIRONMENT FOR THE NEXT DECADE.

THE FINDINGS

MOST JOBS WILL CONTINUE TO BE CREATED IN THE SERVICE SECTOR; A LARGE PROPORTION WILL BE "LOW-SKILLED."

THE RATE OF GROWTH IN THE LABOR FORCE WILL EASE UNTIL ABOUT 1995.

THE MAJOR PROBLEM IN OUR SOCIAL SECURITY SYSTEM WILL BEGIN TO HAPPEN IN 2005 AND WILL BE IN FULL SWING BY 2025.

WE WILL LIVE LONGER. PROJECTIONS SHOW SIGNIFICANT AGING OF THE U.S. POPULATION.

POPULATION GROWTH WILL COME MORE FROM THE IMMIGRATION OF FOREIGNERS AND LESS FROM THE BIRTH OF NEW AMERICANS.

WOMEN ARE IN THE WORKFORCE TO STAY AND THEY WILL FORM A BIGGER SHARE OF IT.

BABY BOOMS ARE OVER AND STERILIZATION AFTER TWO CHILDREN WILL BE POPULAR.

EARLY IN THE NEXT CENTURY HISPANICS WILL BE THE LARGEST SINGLE ETHNIC MINORITY.

NO GENERAL RETURN TO THREE-CHILD FAMILIES IS LIKELY.

ILLECAL IMMIGRATION IS CLEARLY OUT OF CONTROL IN OUR NATION.

FAMILY INCOMES WILL CEASE TO GROW AT PAST RATES.

DIRECT COST OF RAISING A CHILD TO AGE 18 FOR A MIDDLE-INCOME FAMILY HAS BEEN ESTIMATED AT $82,000 TO $98,000 WITH FOUR YEARS AT A PUBLIC COLLEGE FIGURED AT 1981 LEVELS.

MARRIED WOMEN OF ALL CLASSES, FAMILY AND HOUSEHOLD TYPES WILL WORK IN GREATER PROPORTION AND NUMBERS, AND MEN WILL WORK LESS.

WOMEN WILL MANAGE HOUSEHOLD FINANCES MUCH MORE. MEN WILL GRADUALLY SHARE THE BURDEN OF DOMESTIC CHORES WITH WORKING WOMEN.

AMERICANS WILL LIVE LONGER, THEIR MARRIAGES WILL NOT. MANY WILL AVOID MARRIAGE; MANY MORE WILL LIVE TOGETHER WITHOUT MARRIAGE.

RURAL AMERICA WILL BECOME MORE SUBURBAN AND LESS NON-URBAN.

ONE CHILD IN THREE WILL KNOW WHAT IT IS LIKE TO LIVE IN A ONE-PARENT FAMILY.

Building Tomorrow Together

Delaware Business—Industry—Education Alliance

Deer Sir: Why you wont higher me?

Mike Royko

It has to be frustrating and discouraging. A young man spends eight years in elementary school, four years in high school and four more years going to college and getting a degree.

Sixteen years of cracking the books. But when he finally jumps into the job market, looking for the payoff, the doors slam in his face.

That's the problem a Chicagoan recently wrote me about. He says he just doesn't understand why he can't find a job in his chosen field.

He believes that he's been conned by the part of the American dream that promises success through formal education. And he wants to know why it has turned out this way.

It's been many years since I've done any job hunting, so I'm not equipped to give him advice.

But I thought that if I printed his letter, someone out there — maybe a personnel director or a job counselor — might offer suggestions, which I'll gladly pass along to him.

Here's what the college graduate wrote — exactly as he wrote it.

"I was wondering can you write an article to the related situation: A college graduate who has earned a degree in Computer Information System, trying to seek employment in the computer-business industry.

"On Sundays I grab the newspaper jobs section, and follow up by mailing ten to fifteen resumes to different companys inside as well as outside the states, then riding into the city twice a week to various coporations to fill out applications, knowing that it will be place on file and half of the time they are not even look at.

"It all seem easy when you are young. First they tell you that you need to go to school to get a education (hopeful a position) so you can get a job.

"But when you are finish with school then they tell you, I'm sorry we are looking for someone with three to five years of experience, and right there, Bang, you fell it and everywhere you go. It's crazy but it seem funny when you know that they are hiring.

"If you tell them how can you get experience when no one is hiring, they look at you an say I don't know.

"A few weeks ago when I was applying for this job, I over heard this receptionist argue at her daughter about missing so many days, because she like to stay out late with her friend, when the receptionist switch to the next line and told her boss the young lady won't be in due to a fever.

"How would you fell after applying for a position, when after waiting several weeks you see the same ad for the same position.

"The government have this set-up call the Job Service, which is to help individual find jobs when ninety percent of the people who goes there are still unemployed.

"The though of going back to school to receive a masters degree was in mind, but we know when the employer see that you have obtain your MBA right after your bachelor, he will say to himself, ahh, a lot of book sense but no experience, if I hire him I will have to pay him more then a person with one degree or no degree. It also cost money to go back to school, most people have a hard time getting through undergrad with the help of odd jobs an loans. It's hard paying the bank back when you are not working.

"Well, I guess that's life after college, maybe you haven't experienced this, but I though that I should share this with you and to the others who are having such a hard time. I hope to hear some type of response good or bad to add to my collection of dear John Letter."

As I said, I'm not sure what the young man's problem is or what to tell him.

Do you think it might have something to do with the kind of ties he wears to interviews?

Mike Royko is a columnist for the Chicago Tribune. His column appears Tuesday and Thursday in Pace.

LOVE ME ALWAYS

You say you love me, but sometimes you don't show it. In the beginning you couldn't do enough for me. Now you seem to take me for granted. Some days, I wonder if I mean anything at all to you.

Maybe when I'm gone, you'll appreciate me and all the things I do for you. I'm responsible for getting the food on your table, for your clean shirt, for the welfare of your children -- a thousand and one things you want and need.

Why, if it weren't for me you wouldn't even have a car. I've kept quiet and waited to see how long it would take you to realize how much you really need me.

Cherish me -- take care of me -- and I'll continue to take good care of you.

WHO AM I?

EXAMPLES OF UNCLEAR WRITING

The following material was taken from letters received by a state welfare department in applications for support.

1. I am glad to report that my husband who is missing is dead.

2. Please find for certain if my husband is dead. The man I am now living with cannot eat or do anything until he knows.

3. This is my eighth child. What are you going to do about it?

4. My husband got his project cut off two weeks ago, and I haven't had any relief since.

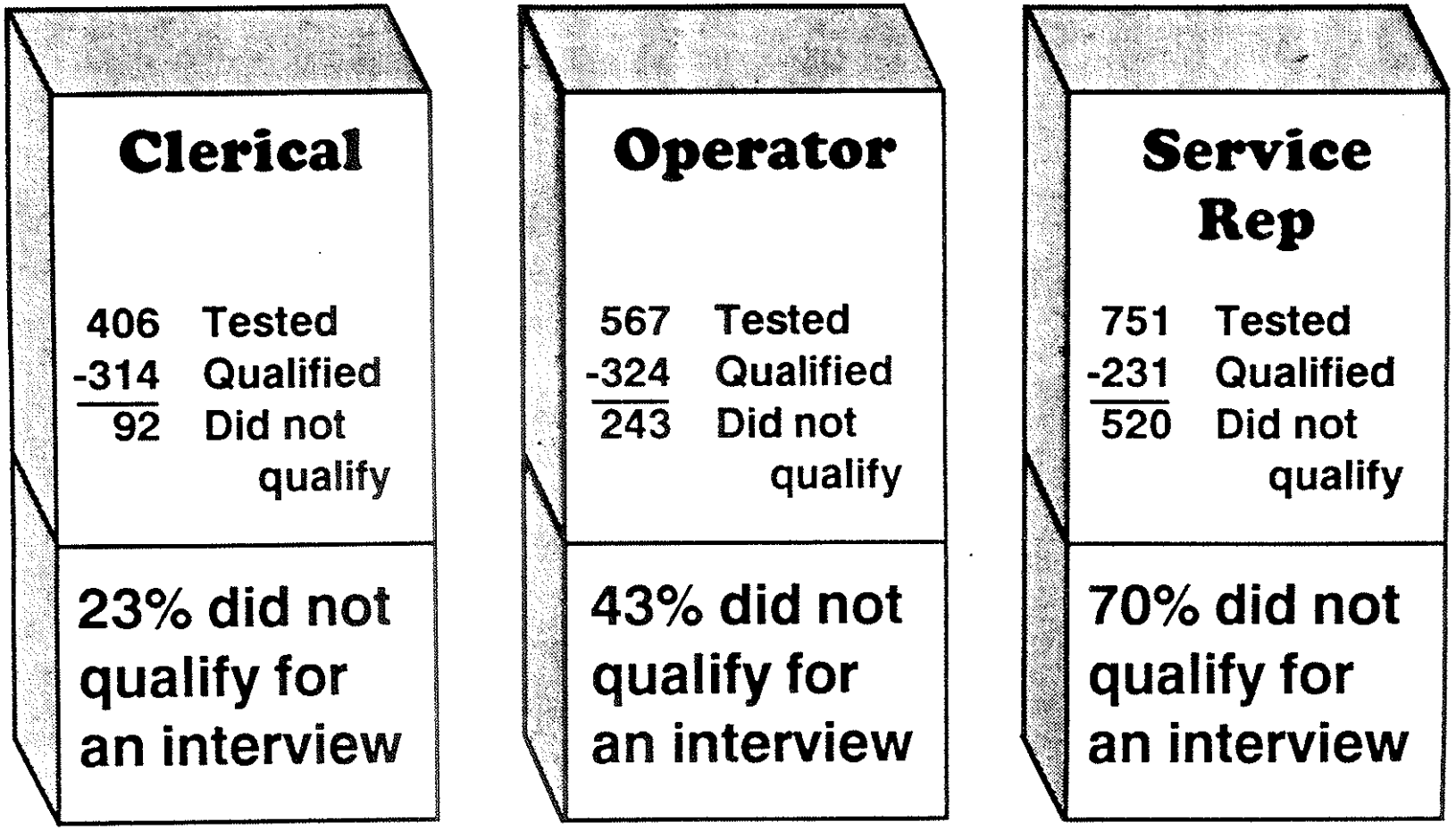
5. You have changed my boy to a girl. Will this make any difference?

6. I want my money as quick as I can get it. I've been in bed with the doctor for two weeks and he doesn't do me any good. If things don't improve, I will have to send for another doctor.

"One's philosophy is not best expressed in words; it is expressed in the CHOICES one makes... In the long run, we shape our lives and we shape ourselves. The process never ends until we die. And the choices we make are ultimately OUR RESPONSIBILITY."

Eleanor Roosevelt

Major Telephone Company
Employment Test Results

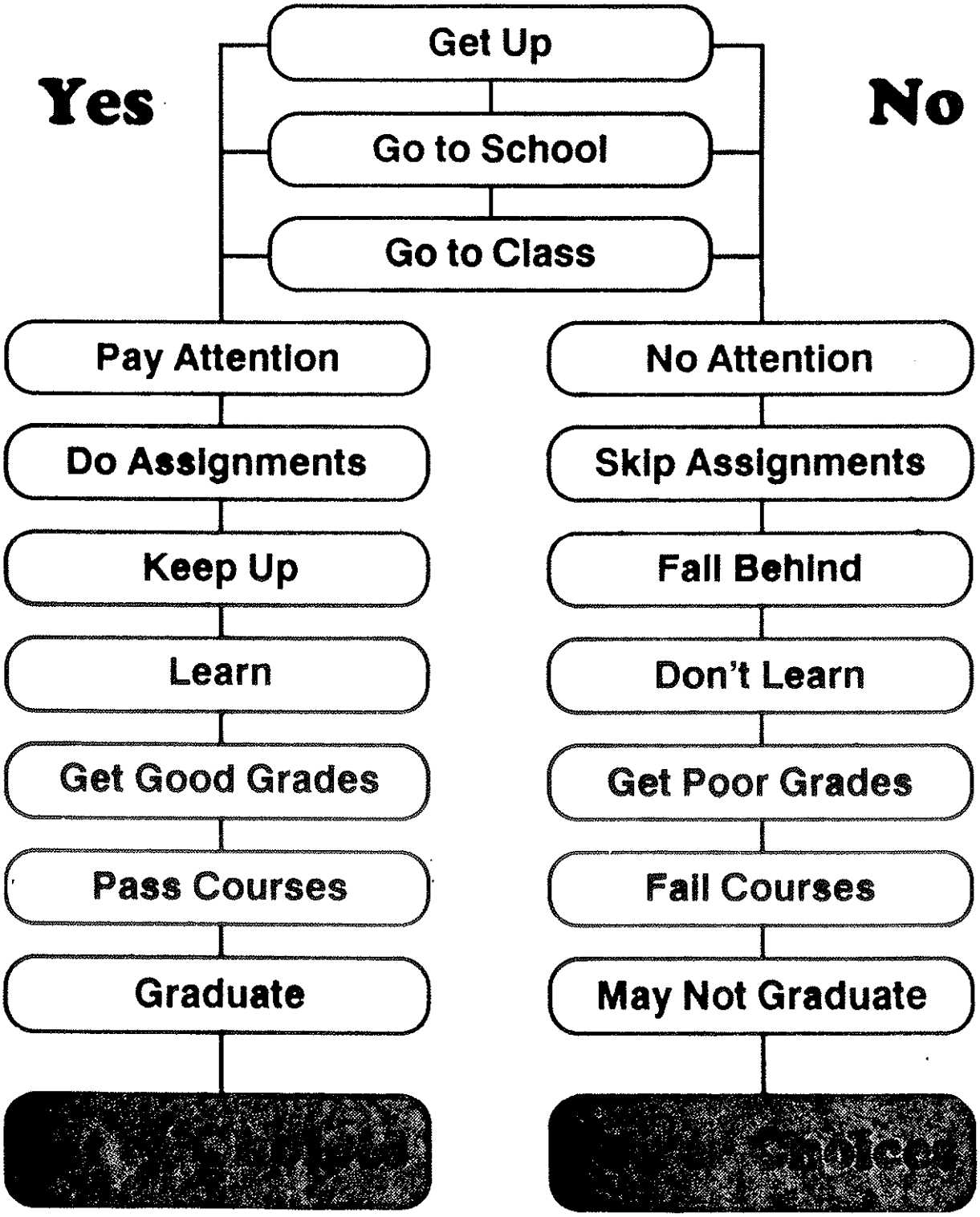


Pressures, Influences, Expectations, Environments Affecting Who I Am

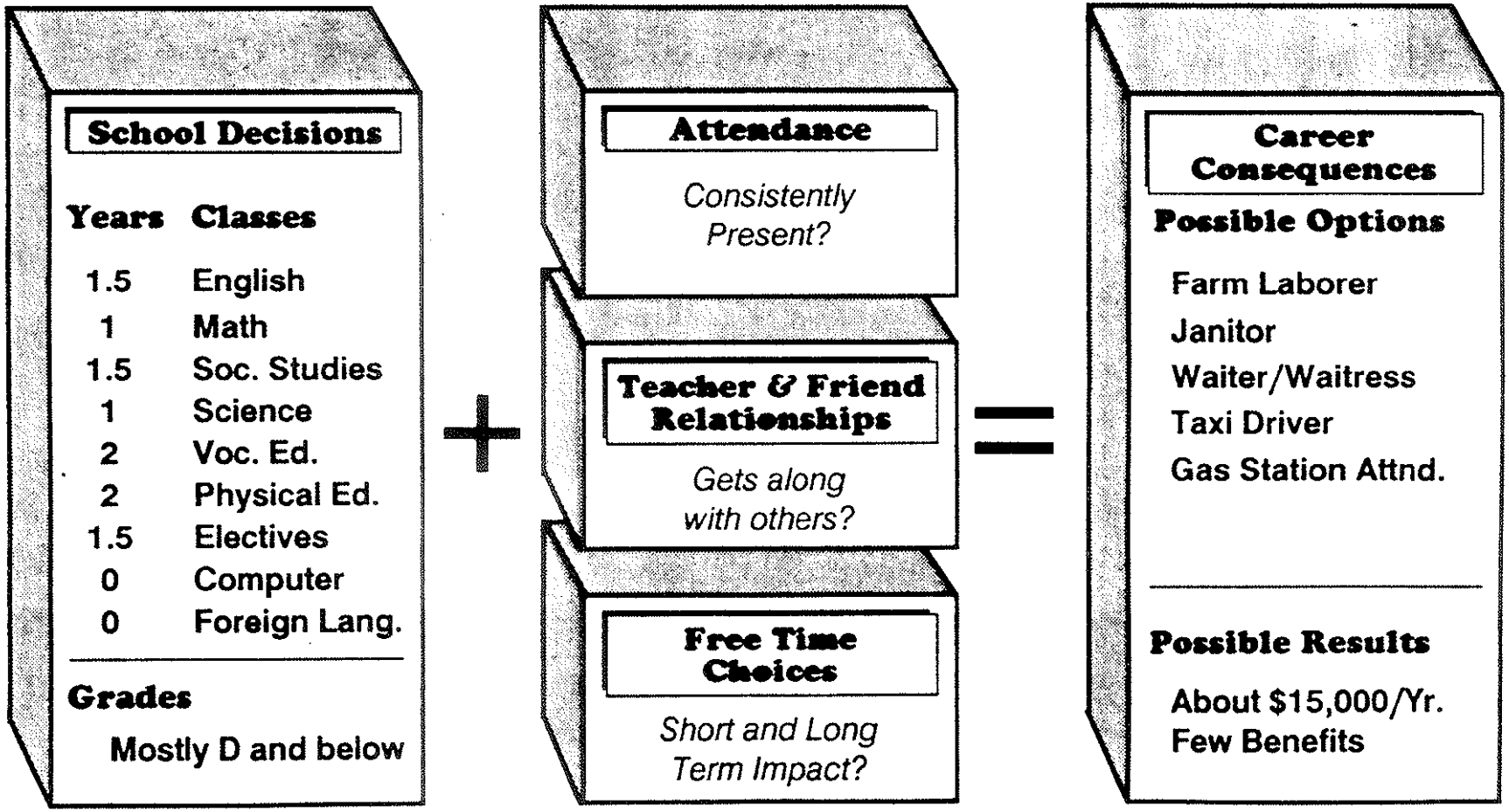
1. Abilities
2. Activities
3. Appearance
4. Attitudes
5. City
6. Country
7. Culture
8. Education
9. Failures
10. Family
11. Friends
12. Gender
13. Goals
14. Health
15. Heredity
16. Home Life
17. Interests
18. Motivation
19. Neighborhood
20. Order of Birth
21. Race
22. Religion
23. Reputation
24. School
25. Self-Confidence
26. Self-Discipline
27. Self-Esteem
28. Size
29. Successes
30. Year of Birth

What does SELF-DISCIPLINE mean to YOU?

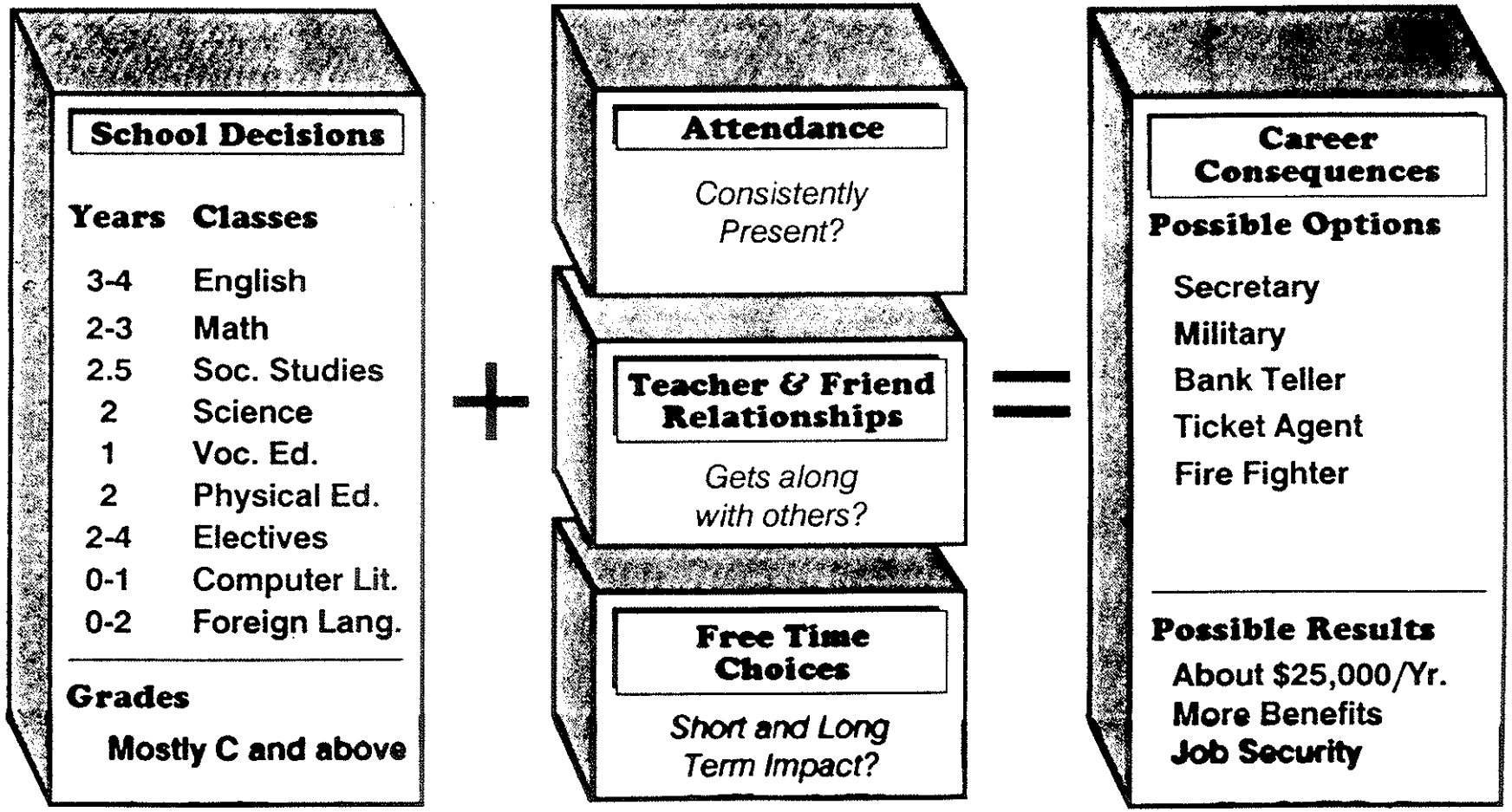
Decisions & Consequences



High School Dropout



High School Graduate



Education Beyond High School

Education Decisions

Four Year University
Community College
Technical Training
Apprenticeship
Military Education
Graduate School

Grades and Performance

Satisfactory and above

+

Attendance

Consistently Present?

Teacher & Friend Relationships

Gets along with others?

Free Time Choices

Short and Long Term Impact?

=

Career Consequences

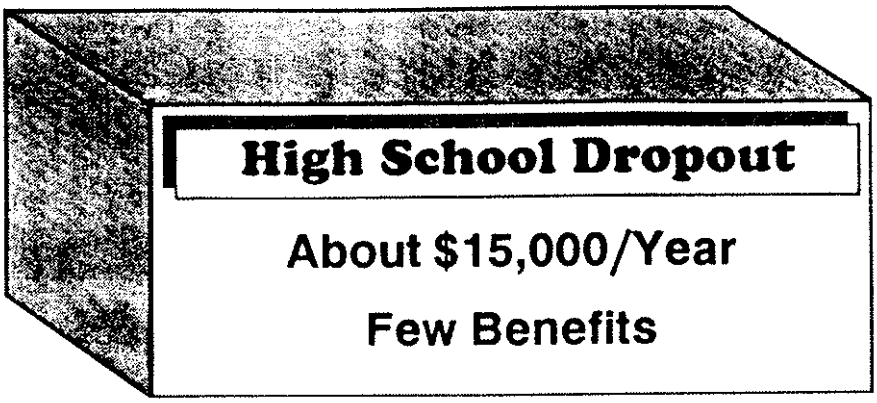
Possible Options

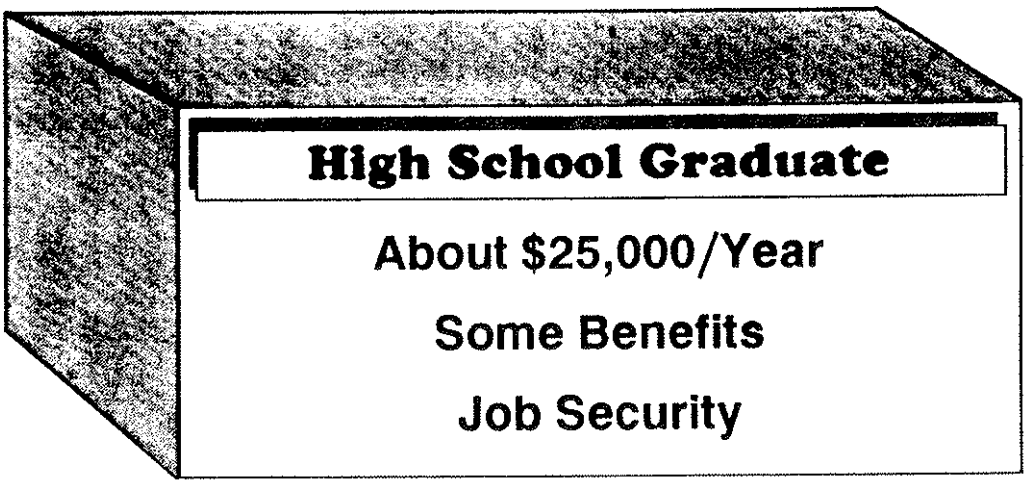
Cosmetologist
Professor
Commercial Artist
Engineer
Computer Prog.
Pharmacist

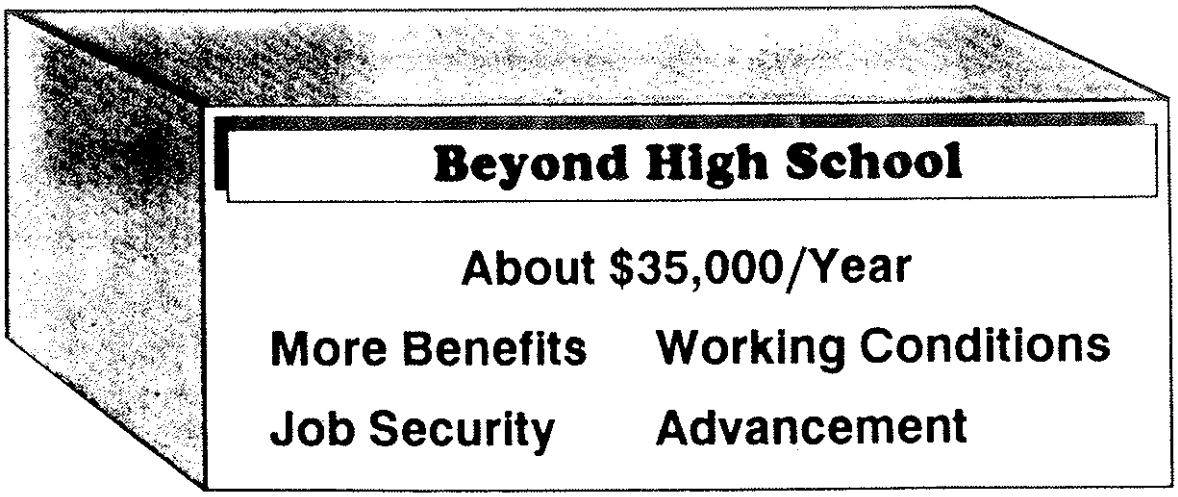
Possible Results

About $35,000/Yr.
More Benefits
Job Security
Working Conditions
Advancement

School Decisions & Career Consequences







GOALS

TO PROVIDE STUDENTS WITH REALISTIC (REAL WORLD) INFORMATION ABOUT POSSIBLE CAREER FIELDS, THEIR CHARACTERISTICS AND REQUIREMENTS AND TO ASSIST STUDENTS IN MAKING DECISIONS RELATIVE TO THE FUTURE.

TO PROVIDE EXPERIENCES THAT WILL HELP STUDENTS DEVELOP POSITIVE ATTITUDES, ABOUT THEMSELVES AND THEIR CAREER.

TO SUPPORT THE EDUCATIONAL PROCESS IN ENCOURAGING STUDENTS TO REMAIN IN SCHOOL UNTIL THEY HAVE SUFFICIENT SKILLS FOR ENTRY INTO THE EMPLOYMENT ARENA.

Graduation is over; your diploma is in hand and hope is soaring. From this point, the majority of decisions about your life belong to you. You will set the direction, chart the course for your life.

Graduation is an ending, and it is a beginning. It is an experience comprised of joy and sadness, hope, and fear. You are about to begin another journey, one offering both excitement and danger.

As you begin your trek, may we who have started this same journey at an earlier time share some insights with you?

First, the road you are about to travel is common to all. Although we seem to be traveling in different directions, in reality we are all pressing toward the same goal. We are all seeking Happiness. And, as we do, we each experience similar joys and disappointments.

Traveling toward this goal, we visit many different places. Dream Street, Contentment Boulevard, and Opportunity Place are only a few of the idealistic places.

But, also on the itinerary are stops in places like Frustration Lane, Disappointment Alley, and the Avenue of Questions. While these stops are neither joyous nor entertaining, they offer immeasurable opportunities for personal growth.

Most people, however, try to arrive at Happiness without visiting them. They are dark and usually very lonely spots where people seem to trip over dreams and ideals with regularity.

Many actually drop these valuable commodities, imagining that they will arrive at their destination more quickly without them. This is only an illusion, however, for only those who succeed in holding onto dreams and ideals ever fully arrive at the place called Happiness.

Graduates, you will be severely tempted but never allow yourself to abandon your dreams. Only learn to flavor them with your own unique experiences. Plan for your journey, but never lock yourself in with predetermined ideas, thus you will never be trapped by the unexpected.

Continue to trust both God and man, learning along life's path to nourish your trust with patience. Hold onto your youthful idealism; yet, let it be tempered throughout your journey with a growing sense of love and truth.

For it is these qualities, carefully cultivated, that produce vision. And it is with vision that you can change the world.

Get the Community on the School Team

We can't do it alone. To be successful, our schools need the help and support of parents, non-parents, the business community, and many others. And the community needs us.

When other institutions have difficulty dealing with the problems of society, they inevitably "turn to the schools." Today, our educational agenda is filled with important concerns ranging from providing education for the handicapped to helping students understand the new technology.

When schools need support, they must depend on the community for help. That's just one reason why citizens must understand the important role they must play if we are to provide excellence in education. They must see the benefits for them in the high quality schools. For example, senior citizens have a self-interest in making sure there are plenty of well-educated people making enough money to keep Social Security solvent. Business people have a self-interest in assuring a well-educated, well-trained work force with enough earning potential to guarantee plenty of future ~~customers~~ consumers with spendable incomes.

Coalitions can bring together many groups in the community which share a common interest in quality schools. Working together with interested people of diverse backgrounds and various walks of life, we can better assure that our schools are responsive to the community needs. In turn, the needs of our schools become more apparent to citizens.

We need more than school spirit; we need spirit for the schools. Let's make high quality education a community decision. Then, let's work together to make it happen.

1989

REMDC CONFERENCE

CONSUMER COST – SIZE? – DENSITY?

5/15/89

Bob Bauman

Butler County R.E.C.

NRECA MANAGEMENT SERVICES PRESENTATION

MINI SEMINAR

1985 Regional Meeting

Mergers - Coming to "grips" with the issue of merger or consolidation. If we're going to best serve the members, how can we not take a look at this at the appropriate time. How can we ignore the efficiencies and economies of size - e.g. REA studies show in 1984 operations, maintenance, administrative and general consumer accounting costs per consumer were:

$247	systems under 2,500 consumers
$182	those 4,000 to 6,000 consumers
$157	those 6,000 to 9,000 consumers
$120	those over 25,000

If we ignore the need to look at merger or consolidation, the members will pay.

1988 Data from REA Bulletin 1-1 for:

Ohio
Indiana
Michigan
Illinois
Wisconsin
Minnesota
North Dakota
South Dakota
Nebraska
Kansas
Missouri

From REA Form 7

Line 11: Total Operation & Maintenance Ex.

Less

Line 3: Cost of Power

Equals "Internal Operating Expense"

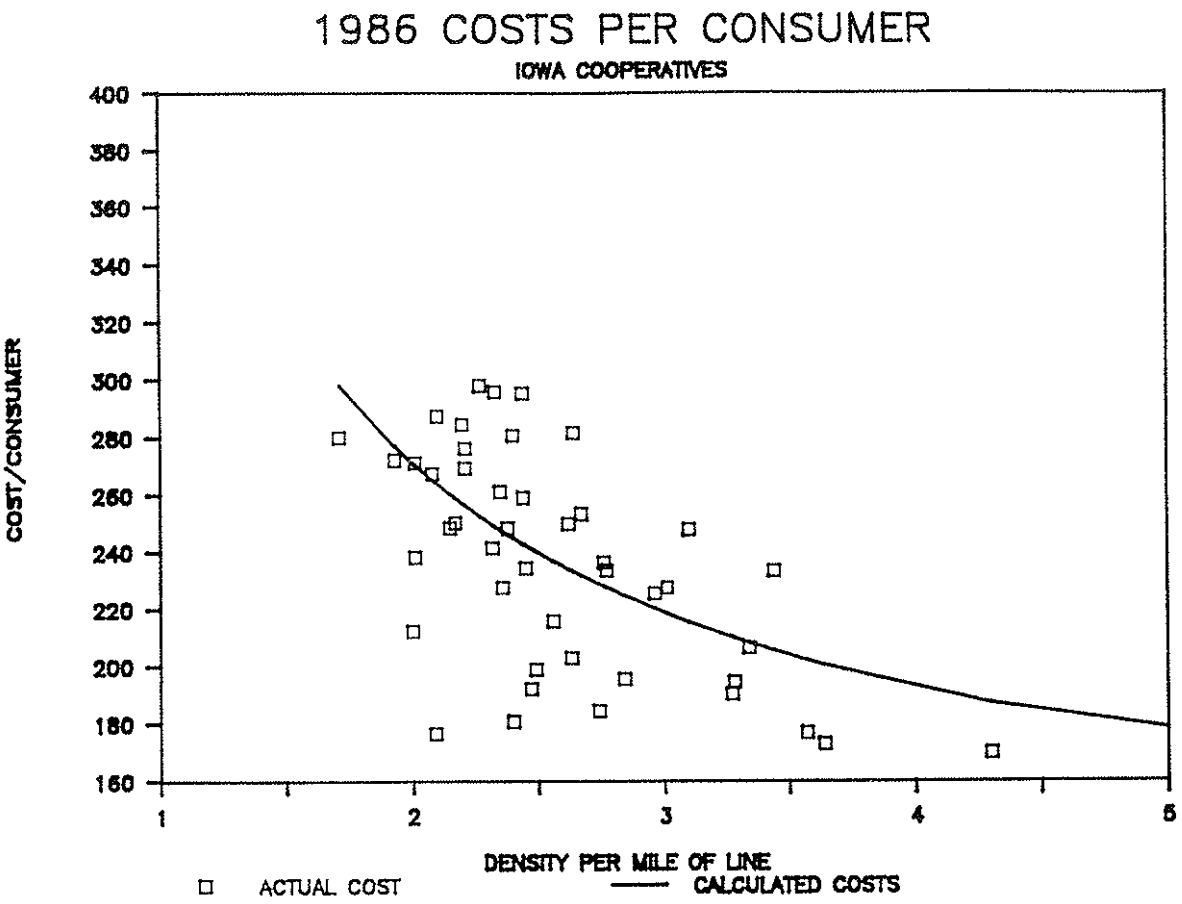
Categories Based on Number of Members

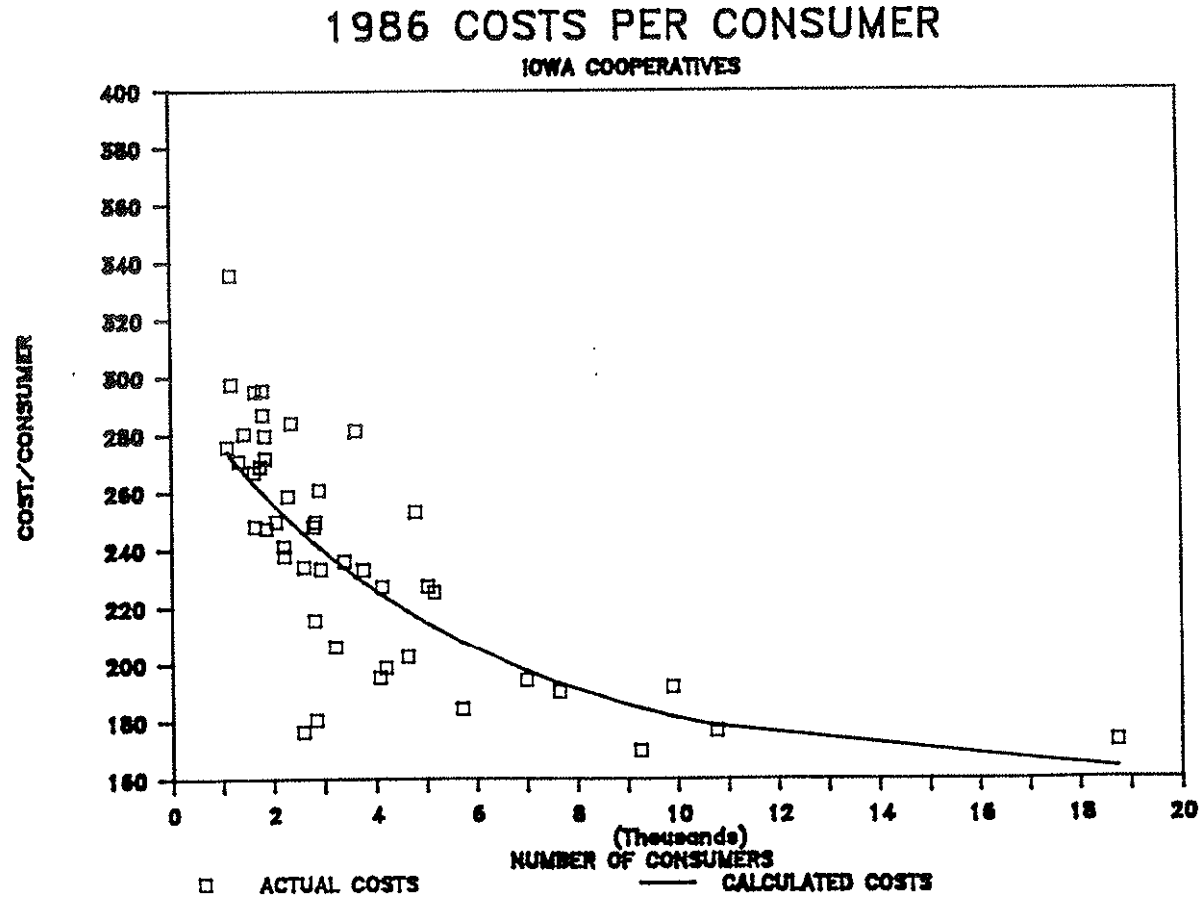
	No. of Co-ops	Average Cost per Consumer	Average Density (1)
Size < = 2500	53	264.46	2.12
2500 < Size < = 4000	90	225.01	2.61
4000 < Size < = 6000	79	208.27	3.21
6000 < Size < = 9000	51	177.46	4.81
9000 < Size	84	157.66	5.60

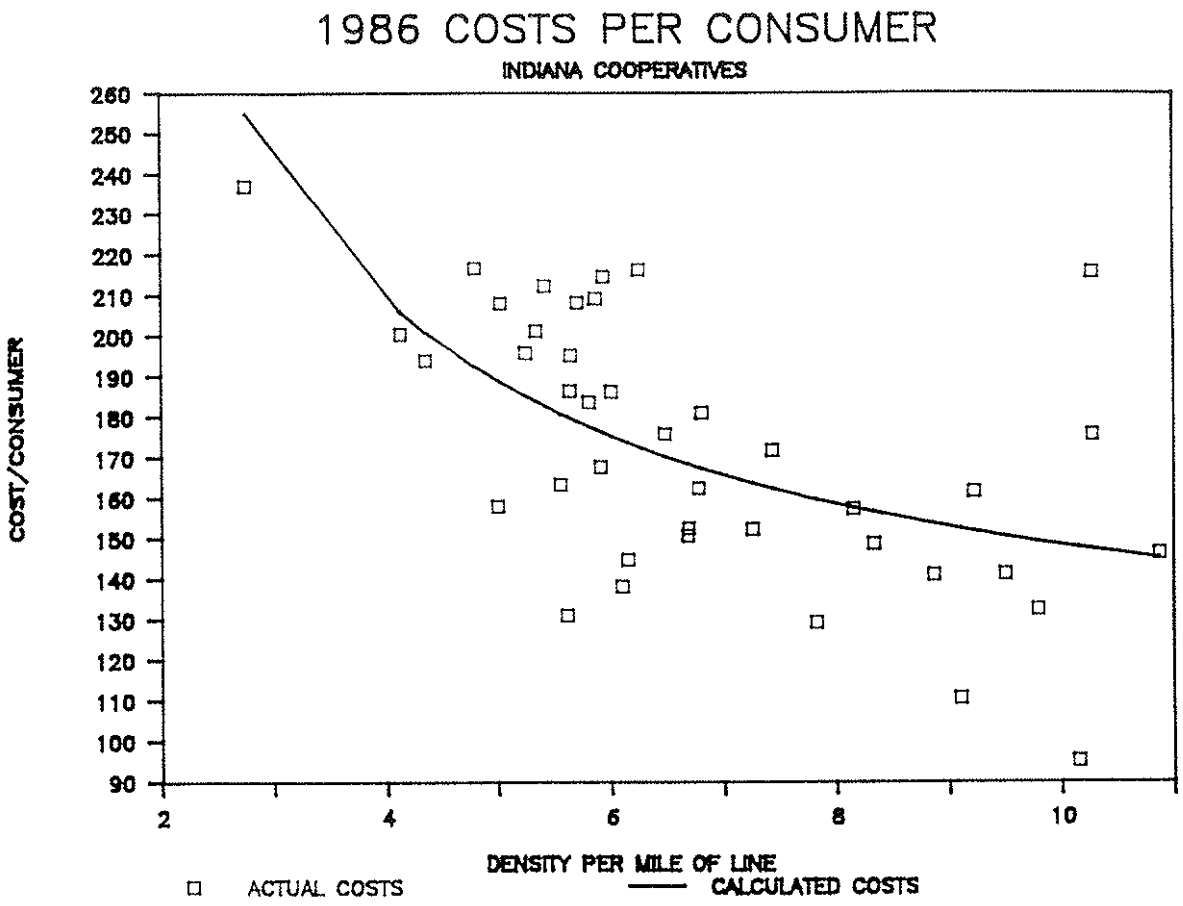
Categories Based on Density

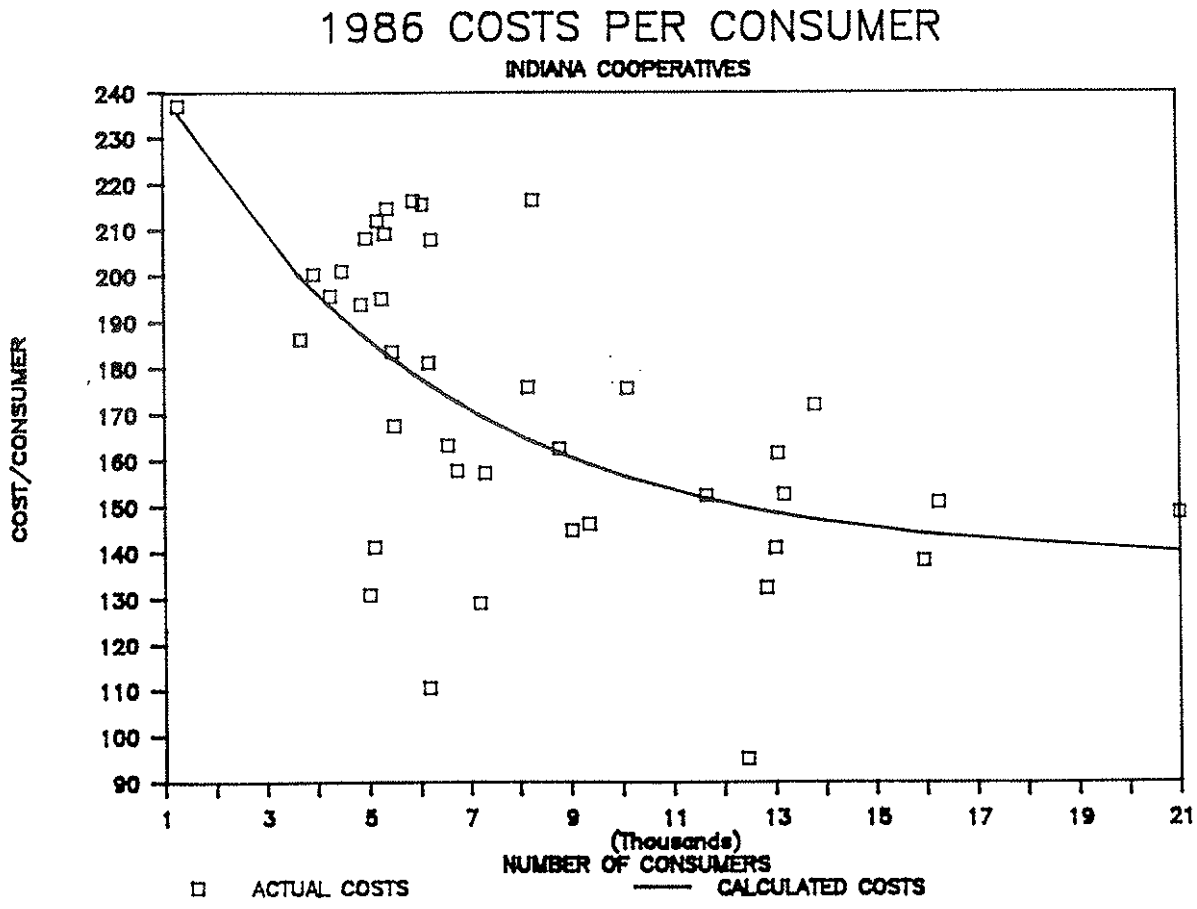
	No. of Co-ops	Average Cost per Consumer	Average Size
Density < = 1	3	292.14	1792
1 < Density < = 3	176	237.13	3823
3 < Density < = 5	89	182.41	8137
5 < Density < = 7	63	165.12	10181
7 < Density < = 9	20	142.50	16298
9 < Density	12	143.85	17259

1 Sum of the Individual Densities Divided by the Number of Cooperatives.


1986 COSTS PER CONSUMER
IOWA COOPERATIVES
COST/CONSUMER
400
380
360
340
320
300
280
260
240
220
200
180
160
1
2
3
4
5
DENSITY PER MILE OF LINE
ACTUAL COST
CALCULATED COSTS


1986 COSTS PER CONSUMER
IOWA COOPERATIVES
COST/CONSUMER
400
380
360
340
320
300
280
260
240
220
200
180
160
0
2
4
6
8
10
12
14
16
18
20
(Thousands)
NUMBER OF CONSUMERS
ACTUAL COSTS
CALCULATED COSTS


1986 COSTS PER CONSUMER
INDIANA COOPERATIVES
COST/CONSUMER
260
250
240
230
220
210
200
190
180
170
160
150
140
130
120
110
100
90
2
4
6
8
10
DENSITY PER MILE OF LINE
ACTUAL COSTS
CALCULATED COSTS


1986 COSTS PER CONSUMER
INDIANA COOPERATIVES
COST/CONSUMER
240
230
220
210
200
190
180
170
160
150
140
130
120
110
100
90
1
3
5
7
9
11
13
15
17
19
21
(Thousands)
NUMBER OF CONSUMERS
ACTUAL COSTS
CALCULATED COSTS

ALLISON, IOWA

BUTLER COUNTY
RURAL ELECTRIC COOPERATIVE
P.O. BOX 98 • 521 N. MAIN
ALLISON, IOWA 50602-0098

Phone: 267-2726 • Area Code 319

ane Rieckenberg
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Vice President

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Treasurer

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Secretary

DIRECTORS:
Kenneth St. John
Raymond F. Kuethe
Kenneth Bushbaum
Gary Poppe
Richard Folkerts

Robert J. Bauman
General Manager

November 1, 1988

Mr. Gil De Roos
1861 N.W. 80th Place
Des Moines, Iowa 50322

Dear Gil:

Enclosed is the information on cost per consumer for Iowa cooperatives as we discussed.

One item not in the explanatory sheet is that there may be other curves that better fit the statistical data. However, we did not feel that it was worthwhile spending time searching for them because they would not have changed our final conclusions.

If you have any questions, please contact me.

Yours truly,

BUTLER COUNTY RURAL ELECTRIC COOPERATIVE

Robert J. Bauman
General Manager

RJB/jb

Enclosure

WERE LIGHTING UP IOWA'S TOMORROW
IOWA'S RECs

STUDY OF COST PER CONSUMER FOR IOWA R.E.C.S (1986 DATA)

NRECA has consistently maintained that the cost per consumer decreases as the size of the cooperative increases and has used this data to promote mergers. They define cost per consumer as line 11 (total operating and maintenance expense) of the Form 7 less line 2 (power production expense) and line 3 (cost of purchased power).

Initially, I doubted NRECA's statements because I felt any decrease in cost per consumer should be attributed more to increased density than to the number of consumers served. To test their statements, Janis Cramer, Operations Secretary, and I decided to take the 1986 information for the Iowa R.E.C.s out of REA Bulletin 1-1 and perform some statistical analysis on this data.

In Iowa's case, what we have discovered is that there is some truth in NRECA's assertion. The decrease in cost is more directly related to number of consumers served than to density, exactly the opposite of what we expected. We found the following curves to best fit the data:

For Number of Consumers:

Cost per Consumer = \$159.21 + (\$141.37)(.83) ^{x}

Where x is the number of consumers divided by 1000.

For Density:

Cost per Consumer = \$114.06 + (\$314.20)/x

Where x is the density per mile of line.

The R^2 correlation coefficient for the number of consumers curve was .51 and for the density curve was .39. This indicates that neither curve is a good fit, but that the number of consumers curve does fit the data more accurately. In other words, there is more relationship between cost per consumer and the number of consumers than there is between cost per consumer and the density of the cooperative.

The attached papers are a graph of the actual and projected cost data and a spreadsheet showing the actual and projected cost for each co-op based on the above curves.

We can draw the following two conclusions. Generally, as size increases, the cost per consumer decreases. Also, the rate of decrease in cost per consumer is much greater as we move from small cooperatives to medium than from medium to large.

Those two statements could be misapplied to argue the case for mergers among small cooperatives, but the truth is that there are sufficient variations in the data that each merger possibility would have to be studied individually.

Bob Bauman
General Manager

Butler County Rural Electric Cooperative

USA SNAPSHOTS

A look at statistics that shape the nation

Most admired first ladies

In a recent survey of 1,000 women, Eleanor Roosevelt was selected by 28% as the president's wife they most admire. Other top picks:

By Jeff Dionise, USA TODAY

Call 1-80

USA TODAY 9/15/88

REPLACEMENT OF FAILED URD CABLE

SEPTEMBER 1988

BY

JACK DELVO

MANAGER, OPERATIONS AND ENGINEERING

CASS COUNTY ELECTRIC COOP INC.

Presented at REMDC Meeting
May 16, 1989

PREFACE

The principal subject of this report will be the failure of the insulation of our URD cable. This is commonly referred to as treeing. Other outages such as digins and component failure are not included.

The opinions and conclusions reached in this report are based on the data that is available at this time. We will continue to gather more data and to study the characteristics of cable. As we learn more, it will be necessary to revise our methods of dealing with this problem.

INTRODUCTION

The premature failure of URD cable has been of grave concern to both Cass County Electric and the industry. Cable that was supposed to last in excess of 30 years has been failing in as little as five to seven years. At the present time the average life of cable at the time of failure is about 14 years. This is about the same as the experience in the rest of the industry.

In May of 1977 REA asked borrowers to start to report insulation failures in URD cable. This was prompted by the failure in Rome cable.

At Cass the first indication of the cable failure problem surfaced with the first failures of 1970 Rome cable. These failures occurred after about five to seven years, and initially the failures were thought to be isolated to one or two manufacturers. Cass County Electric did not have alot of Rome cable, and we replaced most of what we knew that we had. These were the feeders out of Prosper sub, and one of the feeders out of Saunders sub. Including the Rome cable, we have replaced over 150 miles of cable to date.

In September '84 we started to keep records of all cable failures. That is, failures attributed to the failure of the insulation. Other failures such as digins and splices were recorded as outages, but not included in the data base for this report. At this point we have almost four years of data, and over 328 failures.

In November of 1984 I wrote a report on history of URD at Cass County Electric, in which I enumerated the problems with constructing and operating an underground distribution system. Basically, this report says that URD has not lived up to its promise, and has been plagued with problems from the very beginning. Some problems have been sqlved, but many still remain.

Since we had installed varying amounts of cable in different years over a 20 year period, simply counting the number of outages would not give a true indication of which cable vintage was the worst. We used an index of "Failures/100 miles/year". Throughout the rest of this report we will be referring to this index.

THE PROBLEM

Cable failures have been increasing steadily since the middle '70's. In order to try to identify the scope of the problem, we started to compile some data regarding cable failures. We did this by recording the location, brand, age, date, and substation of the failure. This was started in September 1984, and to date we have recorded over 328 failures. We immediately started to analyze this data to try to determine what patterns of failure were occurring. The miles of line were taken from our property records. By indexing the failures in failures per 100 miles of line, we could determine which age of cable was having the most failures. We also checked for patterns of failure by brand, substation, and map. There turned out to be a lot of failures in the Tower City sub area. The sub was all built with the same brand of cable, and all at the same time. Also, we usually purchased only one brand of cable for the year. After some analyses work, the pattern seemed to evolve around the age of the cable, or the vintage year. After accumulating three full years of data and looking at the failure rate per year, some years started to stand out with very high failures; these being all the cable up to and including 1972, and the years of 1976, 1977, and 1978. Since these years represented a large amount of cable, it appeared that it would all have to be replaced. I wanted to be able to determine some plan to replace the failed cable, and how much it was going to cost.

The CPR records would not give me the detail I needed, so I had Roger go through the staking sheet records and build a file that would list the location, length, date, kind of cable, type of circuit; and whether the cable had been replaced.

By breaking out these vintage years of cable (1968 thru 1972 and 1976, 1977, 1978) and comparing the failures, it was possible to get the failures by year instead of simply accumulating them. See figures 1, 2, 3, 4, 5, 6.

What is an acceptable failure rate? I do not know if the industry has a clear definition. Cass has about 3000 cable miles, and last year we had about 140 failures; that is a rate of 4.7/ 100 miles. I would feel that a rate of 2 would be in the range of something that we could live with.

1985 FAILURES (fig 1)

Nineteen seventy has a failure rate of about 28 failures per 100 miles, with 1971 not far behind. 1972 was starting to show up, as it is over 10, and there is a hint of trouble in 1977.

1986 FAILURES (fig 2)

Here there is a dramatic jump in 1972 failures. The failure rate had reached over 55 failures per 100 miles. 1970 and 1971 have remained about the same. 1977 has very little change.

1987 FAILURES (fig 3)

This is the third year of history, and a pattern is developing. All of the cable up to and including 1972 is failing at a very high rate. The years 1976, 1977, and 1978 have been shown to have a very high rate of failure.

Failures also seem to be related to years where there was a high production rate of cable. Pete Lee used to refer to this as, "Spaghetti Cable". One wonders what compromises the manufacturers may have made under the pressure of filling their orders.

These years represent 851 miles of line consisting of about 1400 miles of cable; 153 miles of cable had already been replaced.

At this point we have identified those vintage years of cable that are failing at an unacceptable rate. If all of this cable is bad and has to be replaced - how much will it cost?

Brad estimated the cost of replacement with either underground or overhead. For example, 3 phase 1/0 URD is over $32,000 per mile, and 3 phase 4/0 URD is over $50,000 per mile. See fig. 7.

By using today's dollars, the cost to replace this line with URD will be in excess of $17,000,000. Fig. 15 . This is only the cable that has been identified to date.

At this point several questions arise.

1. Where will we get $17,000,000?
2. Could we do it cheaper?
3. Should we replace with overhead construction?
4. Is the depreciation rate adequate to allow for the short cable life?
5. What will be the effect on the rates?
6. What criteria do we use to determine which cable will be replaced first?
7. How fast will the line have to be replaced?
8. What will happen to the rest of the cable?
9. What will be the life of the cable we are using now?
10. What will be the impact on general funds?
11. Will REA finance the replacement?

DISCUSSION OF THESE QUESTIONS

1. Where will we get the $17,000,000?

The cost of replacing all of the cable identified in this report will be in excess of $17,000,000 if the replacement is done with URD cable. Under the present REA policy, this is considered as ordinary replacement, and the cost of the original plant must be deducted from the amount of funds that REA will advance. This amount will have to come from general funds. At the present

time, this is about $5,000 per mile. This could be as much as $8,000,000.

2. Could we do it cheaper?

The estimated costs are in today's dollars. The cost of repair is approximately $1,000 for each failure. With enough failures, it will equal the cost of new cable. Interest and depreciation on new plant will be about 9% ,or about $1,100 per mile for single phase. This is about the same cost as one failure per mile per year.

3. Should we replace with overhead construction?

There are some powerful arguments in favor to this alternative.

1. Overhead construction will be cheaper. Although there is only a slight difference in single phase line, there is a large difference in three phase, and with 4/0 the difference is almost double. If we were to replace all of the bad cable with overhead, the cost would be $12,300,000, or a savings of almost $5 million; an amount that can not be ignored.

2. At the present time overhead is cheaper to operate and maintain.

3. The outage record of our overhead system is considerably better than our URD system.

4. In the 20 years that we have owned and operated our URD system, it has been a constant battle to keep everything operating. As soon as one problem is resolved, a new one arises. When we replaced the failed 1970 cable, the manufacturers said, "Yes, but this is better cable than that stuff we were making in 1970." There have been dramatic changes in the cable that we use now, and with the stuff that is failing now. All of these changes have been made to improve the life of the cable. The same promises are being made today that were made in the '70s, so there is no guarantee that the cable will reach its design life. It is fair to say that the cable we have today will last longer than the stuff that is failing now. It appears at this time that all cable will eventually fail; the question is, how long. I do not know if anyone is able to give an accurate answer at this time.

5. The life of an overhead system is much longer than an underground system; preliminary results from the depreciation study indicate that the life of our overhead system is about double the life of our URD system.

6. There are some advantages in system design. It will be easier and cheaper to add sectionalizing to an overhead system. A simple fuse or OCR at a single phase tap is cheaper and easier to operate than a pad mounted switch.

7. The overhead line that was built for the original system was built to Grade C construction, which means that it had a safety factor of 2. The overhead line that we are building now is built to Grade B construction, which has a safety factor of 4. This is to say that the new line will be twice as strong as the original system.

8. Sleet storms are always of great concern. The most expensive sleet storm that Cass has had has cost about $350,000. Sleet also seems to be related to certain areas, and is not system wide or random. The sleet storms that Cass has experienced have all been along the west side of the system, where the ground elevation is higher. Tri-County, Cavalier and parts of Nodak have all sustained heavy sleet damage, and on a regular basis. I believe that sleet follows a pattern, depending on the ground or elevation; therefore I believe that Cass's experience should continue about the same as in the past 50 years.

The disadvantage of overhead is that R/W will be harder to obtain. Most of our rural customers have been accustomed to the fact that, "Cass will put it underground". Reversing that image will be hard, and will take a long time.

If we should elect to go overhead, it may be necessary to pay for R/W. Cass has never paid for R/W, but if we feel that we must change back to overhead, or to replace URD with overhead, maybe we should consider paying for R/W.

With the commitment to go overhead, there will be someone that will refuse an easement. In this case it will be necessary to condemn the R/W. This is a right that we have, but have never used. Dragging a consumer into court is something that we may or may not want to do.

The most difficult easements to get are from absentee owners. People who are not actively farming the land have a more difficult time seeing the problem that we have, and they do not experience the outages.

4. Is the depreciation rate adequate to allow for the short cable life?

Preliminary indications of our depreciation study are that the rate is not high enough. The underground plant is only averaging about 20 years.

5. What will be the effect on the rates?

In all likelihood the rate will have to be increased.

6. What criteria do we use to determine which cable will be replaced first?

It would be easy to say if we have three failures on a piece of cable, it should be replaced. This criteria worked fine in 1985, as it resulted in targeting about 10 to 20 miles of cable. This was well within our ability to replace. Now with massive amounts of cable to replace, some new criteria will have to be considered. It would appear a poor idea to replace lines on a crisis basis by rushing out and replacing cable as it failed. This would also result in a higher unit cost. Replacing line in larger blocks would result in lower unit costs, and result in lower total costs when all of the plant was replaced. We could target a combination of vintage year and high priority lines, such as three phase feeders. This would help reduce the outages to the largest number of consumers. The only disadvantage is that it would not squeeze the last bit of life out of the cable.

It will be necessary to establish a systematic schedule to replace, for several reasons. First, because of financial requirements, we will have to work within a budget that we can afford. Second, the available manpower to engineer and build the line. Third, the availability of material. Fourth, the impact of the cost on the rates. All of this will have to fit within a framework that will still give reasonable service to our consumers.

7. How fast will the line have to be replaced?

As far as operations and service are concerned, the sooner the better. As far as cost is concerned, the slower the better. It will be difficult to strike a compromise.

8. What will happen to the rest of the cable?

There is some indication that the cable not included as bad cable, that is the years 1973, 1974, and 1975, will increase its failure rate as it ages.

9. What will be the life of the cable we are using now?

This is a critical question. It unfortunately, does not have a clear answer. The cable we are using now is vastly improved over the cable we have labeled as bad. It has many improvements that will increase its life.

1. Lower number of contaminants.
2. Crosslinked instead of high molecular weight polyethylene.

3. Tree retardant compound.
4. Thicker wall 260 mill vs 175 mill.
5. Jacketed.
6. Ethylene-propylene rubber (EPR) - technically this in not an improvement, but is a different type of insulation.

All of these also increased the cost of the cable.

It is pretty well established that high molecular weight polyethylene (HMP) does not have the service life of cross linked poly., and HMP is the cable that is failing now. The rest of the improvements are bunched up in the last few years. Tests on these new cable designs predict glowing life spans for new cable. However, similar tests on the old cable failed to predict the short life of the cable. Therefore, I would place little confidence in the tests on the new cable. Two of the above improvements have the most promise; the 260 mil wall, and the jacket. Virtually all cable manufacturers and engineers agree that this cable will have a longer service life; the question is, how much longer. You will get a lot of opinions, but I do not believe that anyone has the real answer.

Because of the bad track record of cable, there is a doubt in my mind that polyethylene is a suitable material for cable insulation. Something changes and the material loses it impulse strength, and a tree starts that will lead to a failure. These trees are said to be caused by contaminants (foreign material such as dirt) in the insulation. Some trees are called chemical trees or water trees. The claim is that water penetrates the semicon and into the insulation. The presence of these water molecules will cause a tree. The water can also enter the cable by entering through the strand of a stranded conductor.

10. What will be the impact on general funds?

The accounting for replacing cable is called ordinary replacement. That means that REA will only loan funds on that part that is new. The value of the old plant that is removed must be paid out of general funds. At the present time this is about $4,500 to $5,000. For all of the line involved, this could reach $8,000,000. We do not have $8,000,000 at this time. This would be the same amount if the replacement were overhead or underground. Our ability to generate these kind of funds will limit the amount of replacement that we can do. Raising margins and raising the depreciation rate will generate more cash.

11. Will REA finance the replacement?

REA will finance the replacement as described above. The question is, could REA be convinced to allow a different accounting for the replacement. If, for example, the replacement were considered system improvements, REA would finance the entire amount. There is some merit in approaching

REA with a proposal, as the problem is wide spread and virtually every system with any amount of underground will be faced with the same problem.

THE FINANCIAL IMPACT OF REPLACEMENT

Financing the entire replacement by REA would not reduce the amount of plant investment, but it would ease the cash requirements, as the cash would not have to be generated out of margins, but would be amortized and would spread the cost over a longer period. In the long run it would continue to build up the cost of debt service with a more expensive plant. In the short run it would ease the burden on the rate payer.

As mentioned earlier in this report, we will need $17,000,000 to replace the failed cable with all URD. When this cable is replaced, we will be retiring about $8,000,000 worth of old plant; this will leave a net increase in plant of $9,000,000. The increase in depreciation will be based on this amount.

This scenario is based on the probability that we will not be able to generate the $8,000,000 in cash, and it will have to be borrowed; or that REA will allow us to borrow the entire amount.

The interest expense will be on the $17,000,000 that it will take to replace the cable. Based on our current depreciation rate, this will cost about $1,300,000 more in operating expense, as this entire amount would have to be generated with an increase in rates. See figure 16. This would amount to 3.68 mils/KWH. This will be in addition to the expenses that we have now.

Let us again return to Fig. 16 and look at the same costs, only if the replacement were overhead. The plant replacement would drop to $12,300,000, the retirement would be the same; but the added plant would be less than half, or $4,000,000. The increase in operating costs would be $860,000, and the mils/KWH would be 2.45; a savings of 1.23 mils/KWH.

If we again return to Fig. 16, we can repeat the process with a depreciation rate that is indicated in the depreciation study.

Figure 16A is the same as Fig. 16 except that I have added a credit for emergency URD maintenance. If by some magic we replaced all of our bad cable and we didn't have any more failures, we would not have to spend this money. We know, of course, that this would not happen and we would still have some trouble. Because it does not have a great impact I have not made an attempt to proportion it out.

This does not assume that we will change the depreciation rate to that stated in the study, but it is a land mark of what the costs would be;, if in fact, that rate were used. In all

likelihood our depreciation rate will change, and the final rate will lie somewhere in between.

SUMMARY

The cable is failing and must be replaced. The cost of this replacement is so great that it will have a great impact on the rate structure of the Coop. This leads to a strong feeling that the replacement should be overhead, as it is the cheapest, and it eliminates the risk of more unreliable cable. The failures are happening now. The bad cable is already identified. In order to give the best service, we should be replacing as soon as possible. This would be ideal, but the limitations on our financial resources will not allow for that to be done.

With the strong financial advantage of overhead construction, several questions arise.

Should we make all replacement overhead?

If we should elect this option, what reaction will there be from the membership? It may not be possible to replace overhead in urban areas. It is almost certain that if we elect overhead, we will not be able to get right of way. Should we condemn the R/W? How will this affect our image?

Can we afford the $5,000,000 penalty for URD? If we bite the bullet and stay URD, there still is the lingering question of how long will the new replacement cable last?

With all of these questions, the solution may lie in some kind of mix. We would replace all of the three phase lines with overhead. This is where URD is the most expensive and would provide the greatest savings, and open the door for some system design advantages. We may want to delay replacement of some of single phase lines to try to extend the life. By sectionalizing these single phase lines off of the three phase lines, this would keep the feeders on, and reduce the number of consumers that were out when a cable failed. An inexpensive fused cutout or OCR on an overhead line could accomplish this. URD would be reserved for urban and farmsteads. This would avoid the long distance exposure and promote safety and aesthetics in those areas. I would like to see new line extensions made overhead. This could give us trouble with R/W, but the savings would be worth it.

We will need to firm up a policy in this regard because of the impending work plan. We are in the process of a new work plan, and we will have to know which cost estimates to use for line extension in the work plan.

ANNEX

Earlier in this report I indicated that I seriously questioned that polyethylene was an adequate insulation material. After a visit with some professors at NDSU, I am convinced that it is not. Dr. Urban from the polymers and coatings department said that poly is a long chain molecule of carbon with hydrogen on each side; and when it is exposed to high voltage and there is water present, the carbon will loose a hydrogen and two carbons will form a double bond, and that this new molecule will be conductive. The reaction acts like a zipper and the reaction will travel the length of the molecule. There is no way that you will keep water out of the insulation and there will always be the presence of high voltage. It is only a question of time as to when the insulation will fail. This would appear to explain the failure pattern that we are experiencing.

The changes that we have made to the cable specification will help, and it will extend the life of the cable; but how long is a question.

The question of should we continue to use poly is, "How much are we willing to pay for a short lived cable?" Other insulating materials such as EPR could be used. Its properties indicate that it will live longer, but it will eventually fail. If we do build URD, EPR will probably be the best choice, as it will have the longest life. The question again is, "How much are you willing to pay?"

RECOMMENDATIONS

1. I would like to build as much overhead as possible.

With the uncertainty of URD and the added cost we should avoid using it as much as possible until better, and more cost effective cable becomes available.

2. All new and any replacement of three phase lines will be overhead.

The three phase lines are where most of the cost is, both for the cable and the sectionalizing equipment. These lines will remain and be needed even if we continue to loose consumers in the rural areas. Single phase extensions to farms are prone to being abandoned if the farm is vacated. Many three phase lines are located along good roads, and there is a good chance that R/W can be obtained along the road or even on public R/W.

3. If we cannot get private R/W we should use public R/W.

If the road is improved it may be necessary for us to move the line at our own cost, but it will still be worth it.

4. We should pay for R/W for overhead line.

The question, "Do you pay for the R/W? always comes up when you ask for R/W. If this would help us obtain R/W, I think it would be worth it. If we were to condemn R/W and have to pay the owner, so it would seem fair to pay those that agreed to an easement.

5. We should be prepared to condemn R/W if the need arises.

This would be necessary in order to have continuity in the design.

6. If the consumer insists on URD, there should be a added cost.

There are cases when it is best to install URD. In those cases there should be an extra charge for the URD. This should be considered for urban area.

7. Use EPR cable for all new URD installations.

Stop using polyethylene and use EPR until something better is available.

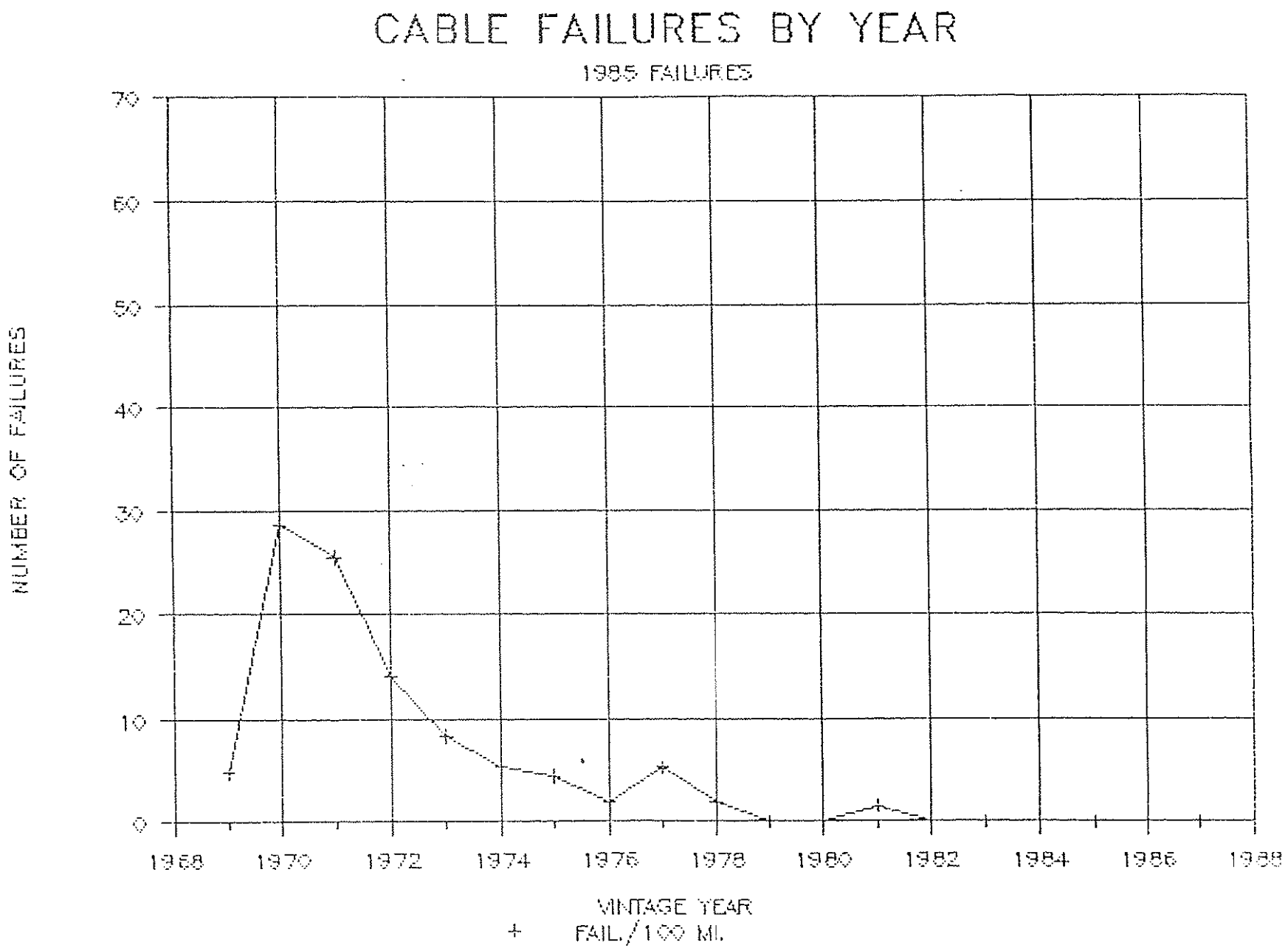
CABLE FAILURES BY YEAR
1985 FAILURES
NUMBER OF FAILURES
70
60
50
40
30
20
10
0
1968
1970
1972
1974
1976
1978
1980
1982
1984
1986
1988
VINTAGE YEAR
+ FAIL./100 MI.

Fig. 1

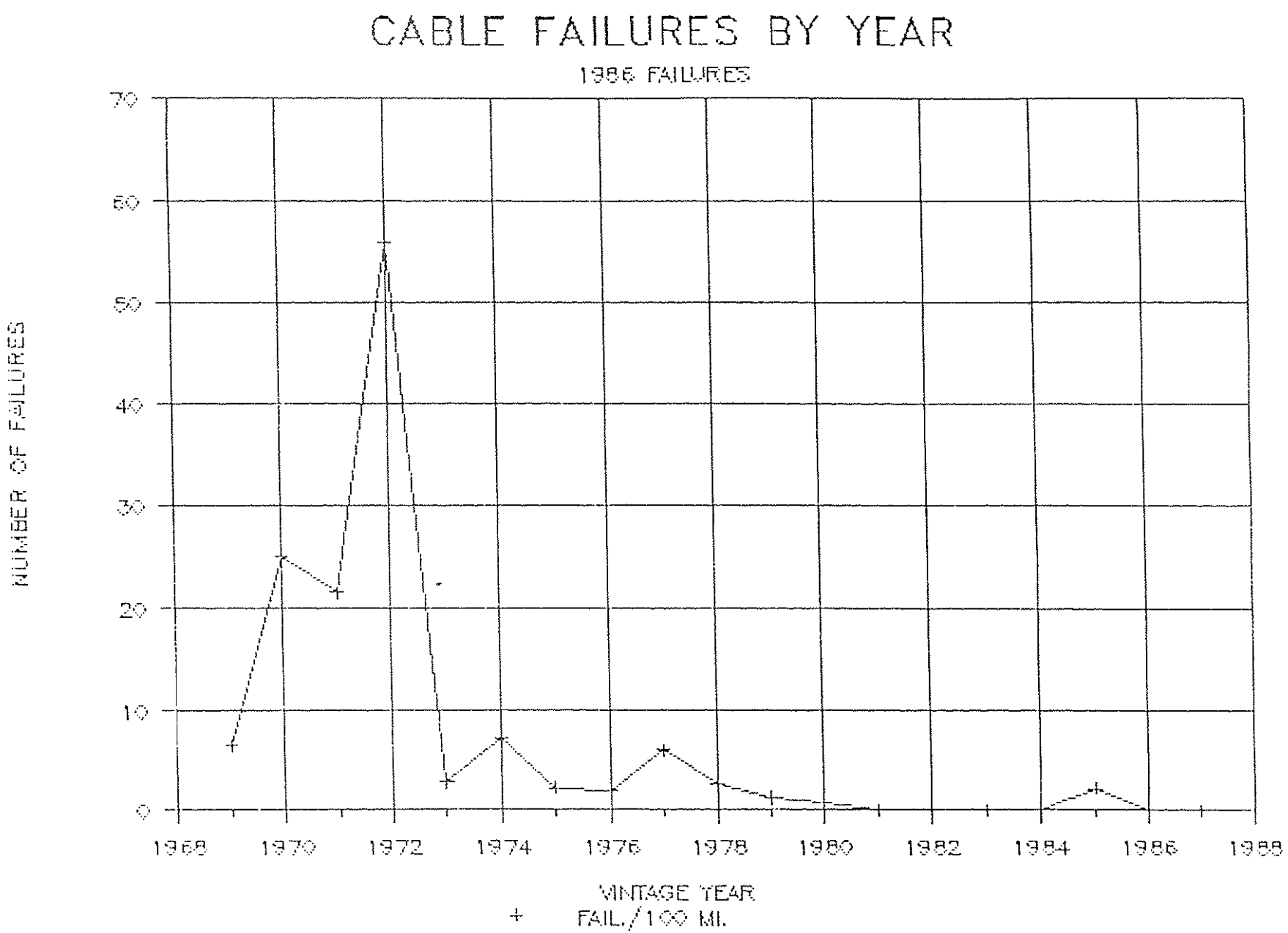
CABLE FAILURES BY YEAR
1986 FAILURES
NUMBER OF FAILURES
70
60
50
40
30
20
10
0
1968
1970
1972
1974
1976
1978
1980
1982
1984
1986
1988
VINTAGE YEAR
+ FAIL./100 MI.

Fig. 2

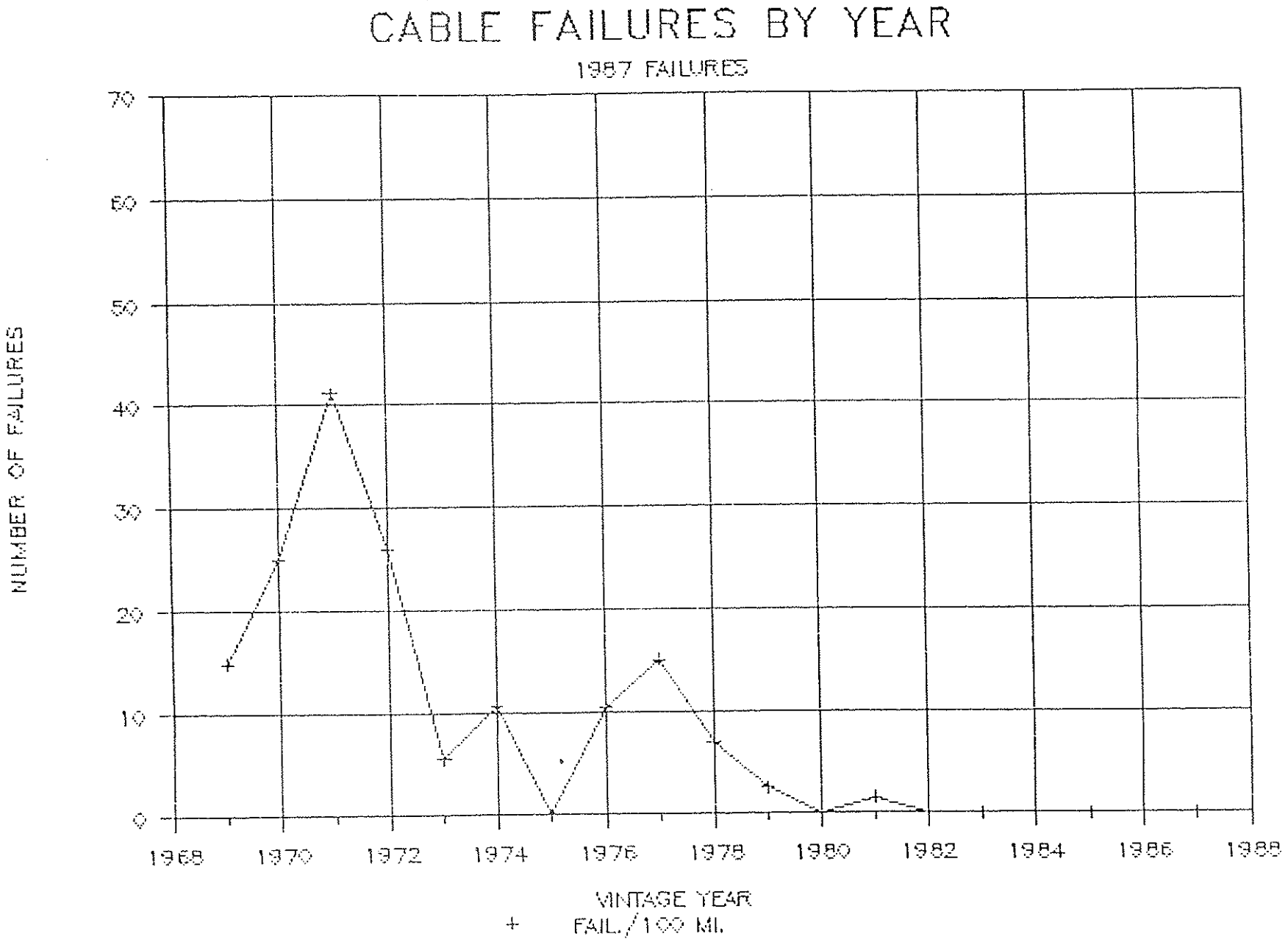
CABLE FAILURES BY YEAR
1987 FAILURES
NUMBER OF FAILURES
70
60
50
40
30
20
10
0
1968
1970
1972
1974
1976
1978
1980
1982
1984
1986
1988
VINTAGE YEAR
+ FAIL./100 MI.

Fig. 3

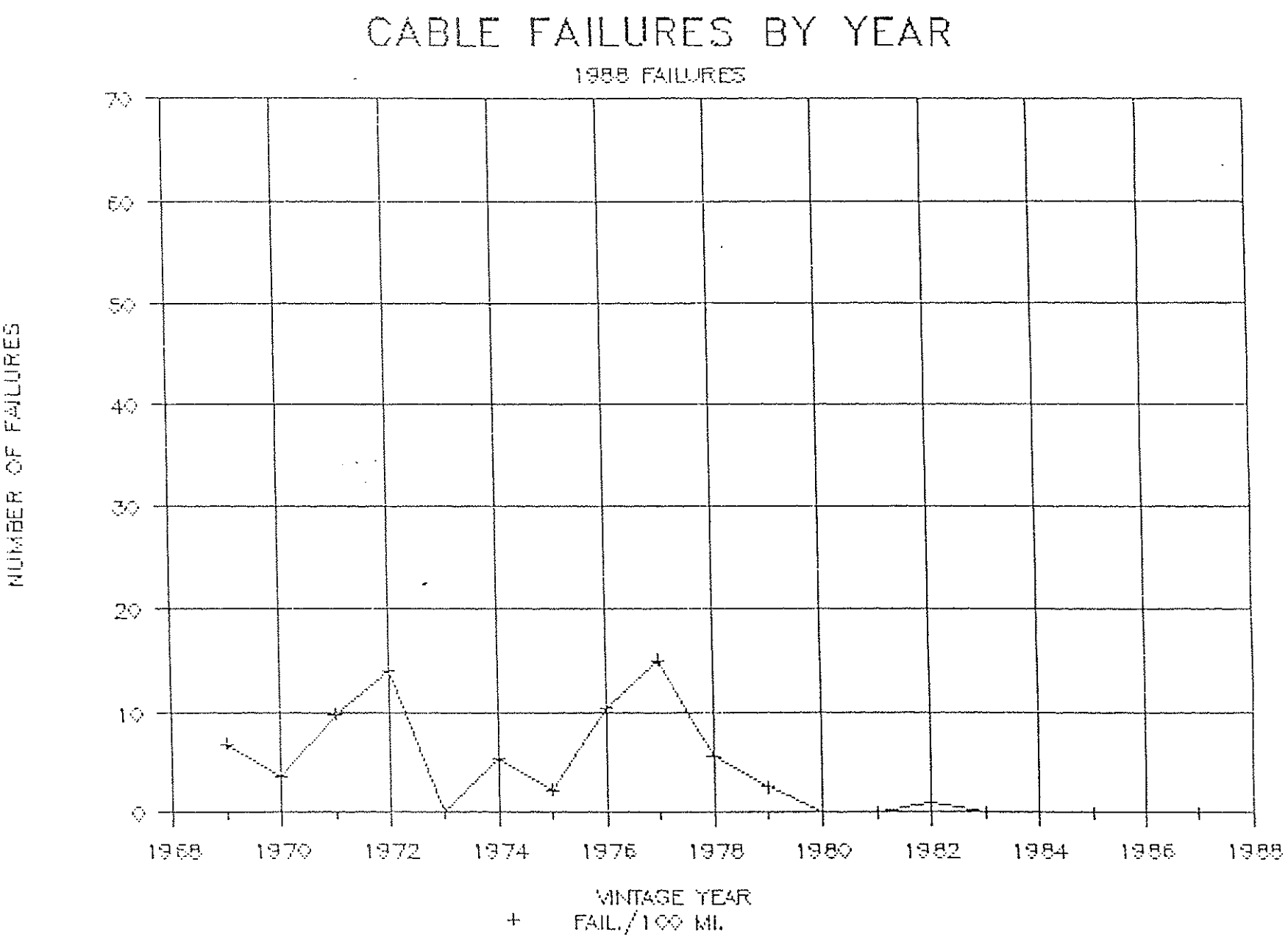
CABLE FAILURES BY YEAR
1988 FAILURES
NUMBER OF FAILURES
70
60
50
40
30
20
10
0
1968
1970
1972
1974
1976
1978
1980
1982
1984
1986
1988
VINTAGE YEAR
+ FAIL./100 MI.

Fig. 4

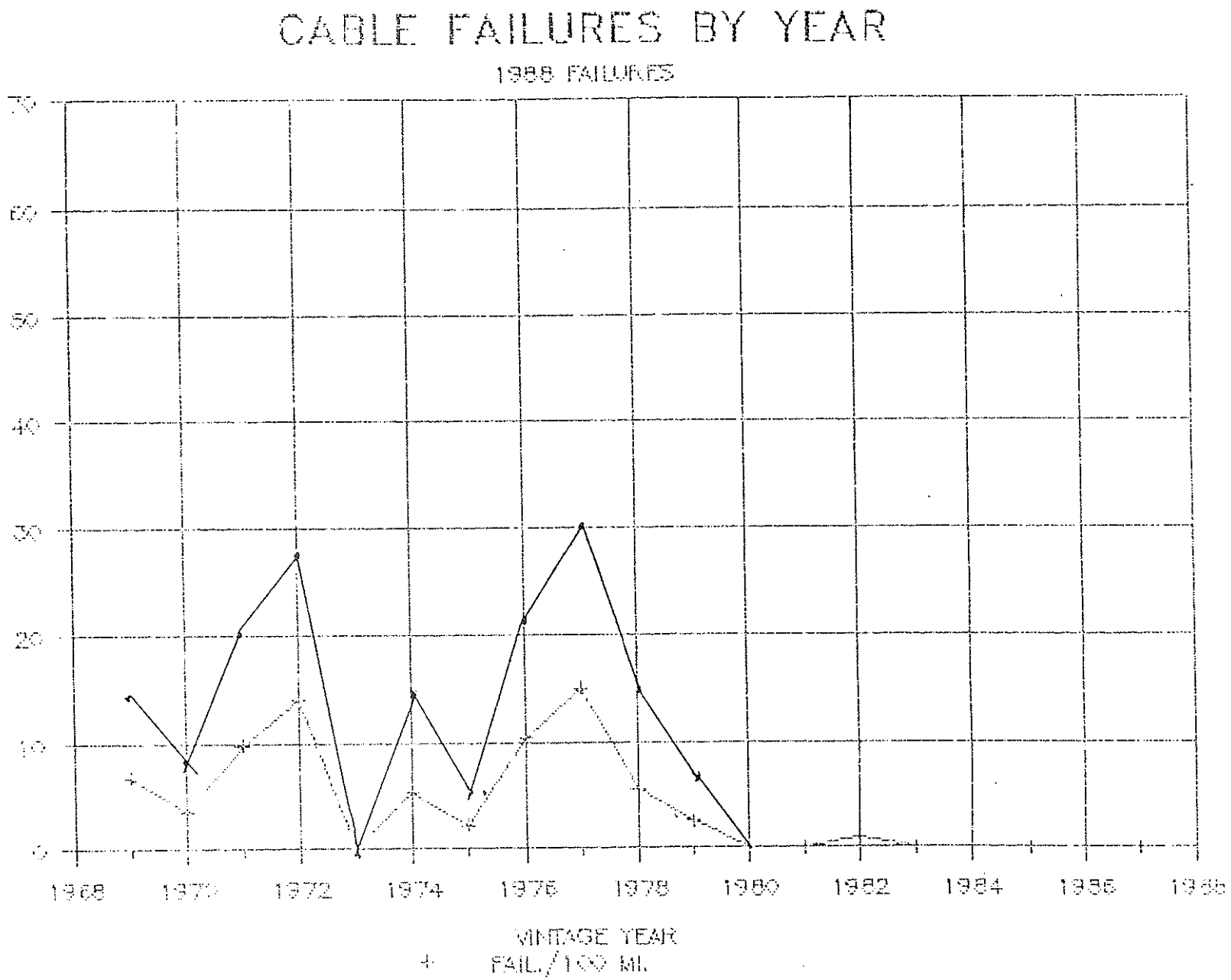
CABLE FAILURES BY YEAR
1988 FAILURES
NUMBER OF FAILURES
70
60
50
40
30
20
10
0
1968
1970
1972
1974
1976
1978
1980
1982
1984
1986
1988
VINTAGE YEAR
+ FAIL./100 MI.

Fig. 5

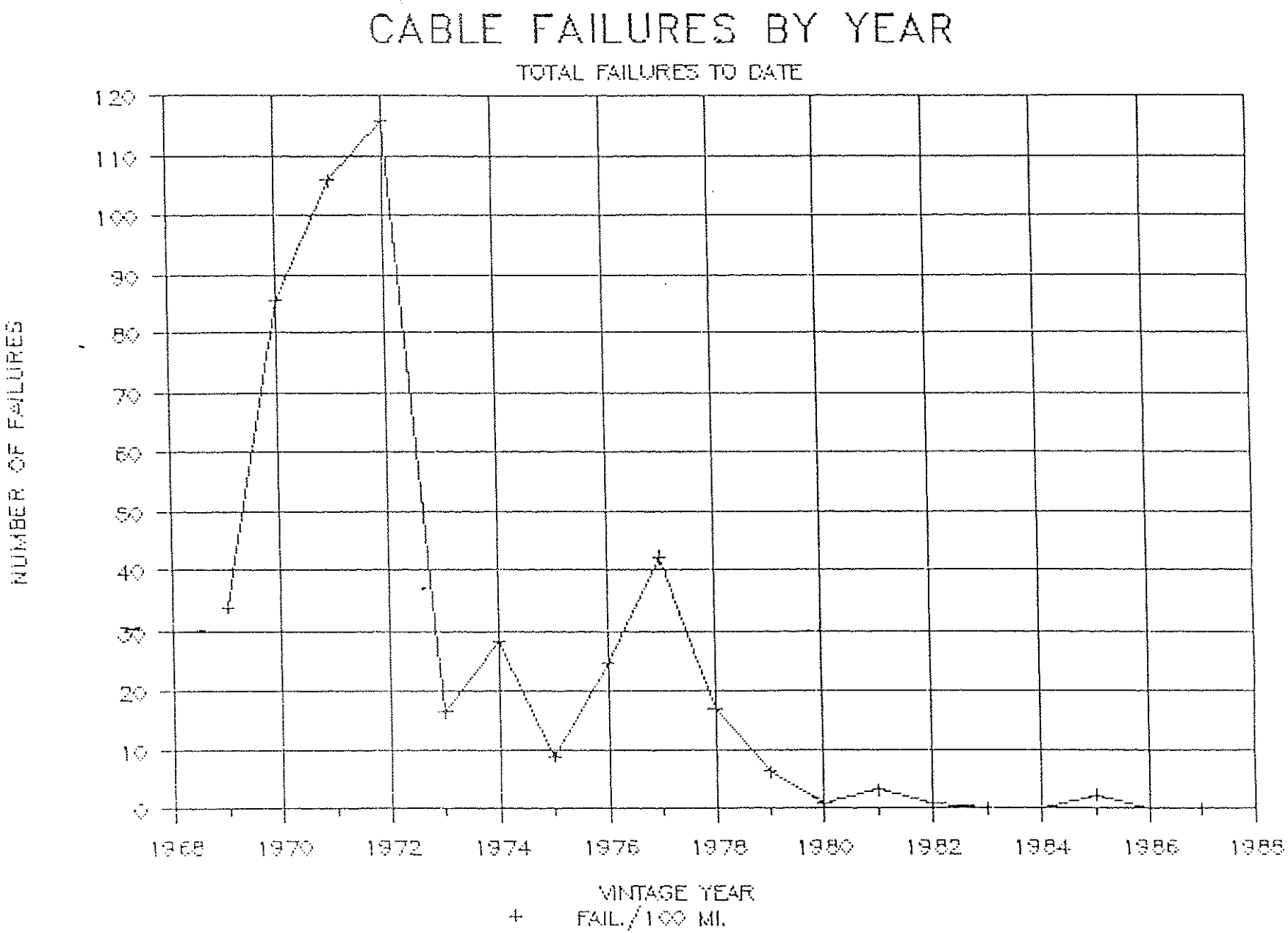
CABLE FAILURES BY YEAR
TOTAL FAILURES TO DATE
NUMBER OF FAILURES
120
110
100
90
80
70
60
50
40
30
20
10
0
1968
1970
1972
1974
1976
1978
1980
1982
1984
1986
1988
VINTAGE YEAR
+ FAIL./100 MI.

Fig. 6

27 Jul 88

CABLE PRICING TRENDS

YEAR	A 1/0 175	B 1/0 260	C 1/0 345	D 4/0 260	E 4/0 345
1983	0.41				
1984		0.6794		1.159	
1985		0.892		1.36289	
1986	0.76	0.9169			
1987		0.9169			
1988		1.228	1.52	1.61	1.951
1988+		1.42044		1.944	

NOTES: COLUMN B: 1988+ CURRENT QUOTED PRICE TO NODAK, FULL NEUTRAL
COLUMN D: 1988+ PRICE IS CURRENT QUOTED PRICE TO CCEC
COLUMN C&E: QUOTED PRICE; BIDS NOT ACCEPTED
COLUMN B: 1988 PRICE IS FOR FULL NEUTRAL CABLE

COMPARISON OF CONSTRUCTION COSTS
OH vs URD

	1-PH 1/0	3-PH 1/0	3-PH 4/0
OVERHEAD	10,979	20,548	28,214
NP OVERHEAD	N/A	N/A	30,862
87-88 URD AVG	10,278	26,075	34,872
* 87-88 URD PROJ	11,128	28,625	N/A
** 88 URD PROJ	12,281	32,087	50,355

* BASED ON 1988 PURCHASED CABLE COSTS
** BASED ON MID 1988 CABLE QUOTES

Fig. 7

CCEC CABLE PRICING TRENDS

1983—PRESENT, PURCHASED OR QUOTED PRICE

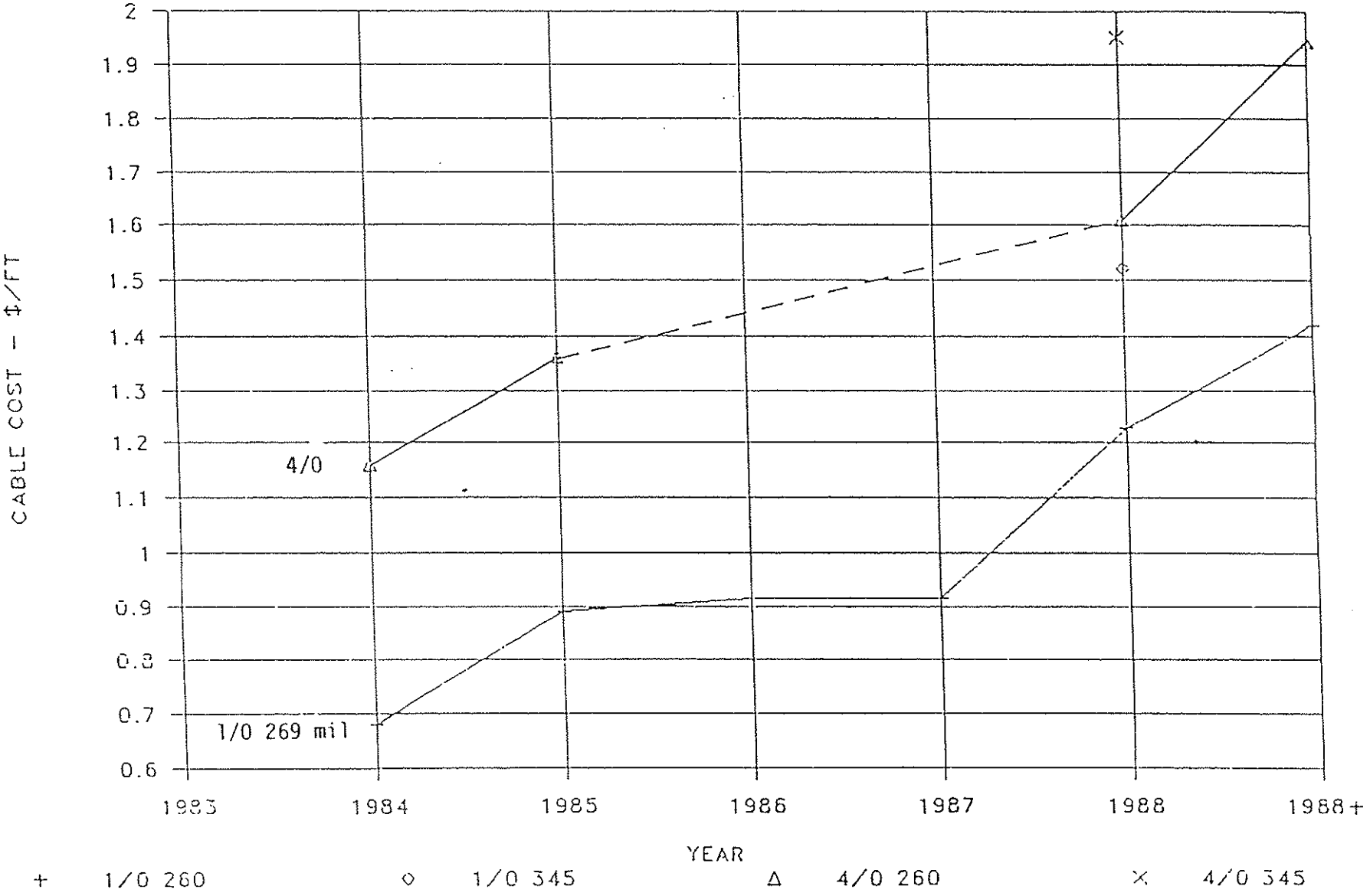

Fig. 8

CONST UNIT	3-PH STD CONST 1/0:#2 PER MILE 300' SPAN 18 POLES/MI MATERIAL	LABOR	3-PH STD CONST 4/0:1/0 PER MILE 275' SPAN 19 POLES/MI MATERIAL	LABOR	3-PH HD CONST 4/0:1/0 PER MILE 275' SPAN 19 POLES/MI MATERIAL	LABOR	3-PH STD NARROW PRO 4/0:1/0 PER MILE 235' SPAN 23 POLES/MI MATERIAL	LABOR	1-PH STD CONST. 1/0:#2 PER MILE 300' SPAN 18 POLES/MI MATERIAL	LABOR
A1A									364.32	251.72
A-100									269.82	78.52
C1A	1103.13	741.54	1168.02	785.16						
C1AP					1327.00	916.02				
C1N							1554.74	959.64		
C5-1							48.94	43.62		
C7	99.61	72.70	99.61	72.70	99.61	72.70				
C-100	698.02	123.59								
C-400			1239.48	130.86	1239.48	145.40	1514.92	159.94		
E7-2	40.06	65.43	40.06	65.43	40.06	65.43	40.06	65.43		
F1-2S	34.04	72.70	34.04	72.70	34.04	72.70	34.04	72.70		
M2-11	44.80	152.67	44.80	152.67	44.80	152.67	51.20	174.48	152.67	152.67
M2-12	14.10	145.40	16.92	174.48	16.92	174.48	21.15	218.10	159.94	159.94
OHP10ACSR	3757.17	967.32	1252.39	322.44	1252.39	322.44	1252.39	322.44	1252.39	322.44
OHP2ACSR	919.75	241.83							919.75	241.83
OHP40ACSR			7529.31	1088.23	7529.31	1088.23	7529.31	1088.23		
P35/4	2205.12	868.91	2342.94	923.22	2342.94	923.22			2205.12	868.91
P40/4	359.38	128.24	359.38	128.24	359.38	128.24	3953.18	1410.67	359.38	128.24
P45/4							204.20	64.12		
TOT MAT.	9275.18		14126.95		14795.93		15999.93		5049.25	
STORES 15%	1391.28		2119.04		2217.89		2399.99		757.39	
LABOR		3580.33		3916.13		4061.53		4515.25		1874.03
ENGR. 50%		1790.16		1958.07		2030.77		2257.63		937.02
OVERHEAD 45%		2416.72		2643.39		2741.53		3047.79		1264.97
POEC 19%		1020.39		1116.10		1157.54		1286.35		534.10
TRANSP. 20%		1074.10		1174.84		1218.46		1354.58		562.21
GR. TOT.		20,548		27,055		28,214		30,862		10,979

1985 CONTRACT PRICES:COMPARISON

MATERIAL	9,137		14,844			4,509
CONTR. LABOR	8,641		8,597			3,339
ULTEIG'S	1,070		1,592			598
CCEC LABOR	499		774			1,256
TOTAL/MILE: % DIFF.	17,347	18.5%	25,807	9.3%		9,698 13.3%

CONVERSATION WITH AERIAL CONTRACTORS 7/27/88: CONTRACT PRICES HAVE INCREASED BY ABOUT 10% SINCE 1985, INCLUDING LABOR AND EQUIPMENT.

APPROXIMATE 2 PHASE COST (1/0:#2): 17,056/MI

Fig. 9

CABREPLA CABLE REPLACEMENT 26-Aug-98

CIRCUIT MILES OF CABLE TO BE REPLACED

OND	PHASE	1968	1969	1970	1971	1972	1976	1977	1978
#2	1	32.09	13.34	6.67	7.91	0.09	0.00	0.57	0.00
	2	0.94	0.41	0.34	0.25	0.00	0.00	0.00	0.00
	3	1.30	0.16	0.00	0.00	0.00	0.00	0.00	0.00
1/0	1	142.20	39.53	20.15	35.55	41.06	53.23	81.02	77.61
	2	0.00	2.11	0.38	0.21	2.37	11.08	19.56	10.60
	3	7.18	8.33	0.56	6.46	4.71	26.34	31.29	97.11
4/0	1	0.00	0.00	0.00	0.00	0.00	0.61	0.00	0.30
	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3	0.00	0.00	0.00	0.28	0.65	12.01	0.09	51.33
	TOTAL	851							

CABLE MILES OF CABLE TO BE REPLACED

#2	1	32.09	13.34	6.67	7.91	0.09	0	0.57	0	60.67
	2	1.88	0.82	0.68	0.5	0	0	0	0	3.88
	3	3.9	0.48	0	0	0	0	0	0	4.38
1/0	1	142.2	39.53	20.15	35.55	41.06	53.23	81.02	77.61	490.35
	2	0	4.22	0.76	0.42	4.74	22.16	39.12	21.2	92.62
	3	21.54	24.99	1.62	19.38	14.13	79.02	93.87	291.33	545.94
4/0	1	0	0	0	0	0	0.61	0	0.3	0.91
	2	0	0	0	0	0	0	0	0	0
	3	0	0	0	0.84	1.95	36.03	0.27	153.99	193.08
		201.61	83.38	29.94	64.6	61.97	191.05	214.85	544.43	

	CABLE MILES	ORIGINAL COST
TOTAL	1,398	
1/0	1,129	6,198,845
#2	69	181,975
4/0	194	1,833,399

TOTAL 8,214,220 THIS IS THE COST THAT WOULD NOT BE FINANCED BY REA AND WILL HAVE TO BE FINANCED OUT OF GENERAL FUNDS

Fig. 10

		CONSTRUCTION COST		ORIG CONST COST	
COND	ϕ	URD	OH	URD	OH
1/0	1	12,281	10,979	5491	5491
1/0	2	28,000	15,000	10982	10982
1/0	3	32,087	20,548	16473	16473
4/0	3	50,355	28,214	28353	28353
#2	1			2640	2640

COST COMPARISON FOR 1/0 URD VS OH

YEAR	3 ϕ 1/0	URD	OH	SAVINGS	1 ϕ 1/0	URD	OH	SAVINGS
1968	7.18	230,395	147,535	82,850	142.20	1,746,358	1,561,214	185,144
1969	8.33	267,285	171,165	96,120	39.53	485,468	434,000	51,468
1970	0.56	17,969	11,507	6,462	20.15	247,462	221,227	26,235
1971	6.46	207,282	132,740	74,542	35.55	436,590	390,303	46,286
1972	4.71	151,130	96,781	54,349	41.06	504,258	450,798	53,460
1976		0	0	0	0.00	0	0	0
1977	31.29	1,004,002	642,947	361,055	81.02	995,007	889,519	105,488
1978		0	0	0	0.00	0	0	0
	58.53	1,878,052	1,202,674	675,378	359.51	4,415,142	3,947,060	468,082

Fig. 11

EAR	1968			1969			1970			1971			
PHASE	1	2	3	1	2	3	1	2	3	1	2	3	1
MILES	32.09	0.94	1.3	13.34	0.41	0.16	6.67	0.34	0	7.91	0.25	0	0.09
URD	394,097	26,320	41,713	163,829	11,480	5,134	81,914	9,520	0	97,143	7,000	0	1,105
ORIG COST	84,718	4,963	10,296	35,218	2,165	1,267	17,609	1,795	0	20,882	1,320	0	238
EA FIN	309,380	21,357	31,417	128,611	9,315	3,867	64,305	7,725	0	76,260	5,680	0	868
OH	352,316	14,100	26,712	146,460	6,150	3,288	73,230	5,100	0	86,844	3,750	0	988
ORIG COST	84,718	4,963	10,296	35,218	2,165	1,267	17,609	1,795	0	20,882	1,320	0	238
EA FIN	267,599	9,137	16,416	111,242	3,985	2,020	55,621	3,305	0	65,961	2,430	0	751
SAVINGS	41,781	12,220	15,001	17,369	5,330	1,846	8,684	4,420	0	10,299	3,250	0	117

	ALL CABLE	YEARS 70-71-72-77	YEARS 70-71-72-77 JUST 36
TOTAL URD COST	846,255	203,682	0
OTAL ORIG COST	181,975	43,349	0
OTAL REA FIN	664,280	160,334	
TOTAL OH COST	725,196	176,170	0
OTAL ORIG COST	181,975	43,349	
OTAL REA FIN	543,221	132,821	
AVINGS WITH OH	121,059	27,512	0

ABREPLA CABLE REPLACEMENT NO. 2 CABLE 24-Aug-88

1972			1976			1977			1978	
2	3	1	2	3	1	2	3	1	2	3
0	0	0	0	0	0.57	0	0	0	0	0
0	0	0	0	0	7,000	0	0	0	0	0
0	0	0	0	0	1,505	0	0	0	0	0
0	0	0	0	0	5,495	0	0	0	0	0
0	0	0	0	0	6,258	0	0	0	0	0
0	0	0	0	0	1,505	0	0	0	0	0
0	0	0	0	0	4,753	0	0	0	0	0
0	0	0	0	0	742	0	0	0	0	0

Fig. 12

CABREPLA

CABLE REPLACEMENT 1/0 CABLE

23-Aug-88

YEAR		1968			1969			1970			1971	
PHASE	1	2	3	1	2	3	1	2	3	1	2	3
MILES	142.2	0	7.18	39.53	2.11	8.33	20.15	0.38	0.56	35.55	0.21	6.46
URD COST	1,746,358	0	230,385	485,468	59,080	267,285	247,462	10,640	17,969	436,590	5,880	207,282
ORIG. COST	780,820	0	118,276	217,059	23,172	137,220	110,644	4,173	9,225	195,205	2,306	106,416
REA FINANCED	965,538	0	112,109	268,409	35,908	130,065	136,819	6,467	8,744	241,385	3,574	100,866
OH	1,561,214	0	147,535	434,000	31,650	171,165	221,227	5,700	11,507	390,303	3,150	132,740
ORIG. COST	780,820	0	118,276	217,059	23,172	137,220	110,644	4,173	9,225	195,205	2,306	106,416
REA FINANCED	780,394	0	29,258	216,941	8,478	33,945	110,583	1,527	2,282	195,098	844	26,324
SAVINGS	185,144	0	82,850	51,468	27,430	96,120	26,235	4,940	6,462	46,286	2,730	74,542

	ALL CABLE	YEARS 70-71-72-77	YEARS 70-71-72-77 JUST 3Ø
TOTAL URD COST	13,157,861	4,194,259	1,380,333
TOTAL ORIGINAL COST	6,198,845	1,932,173	708,668
TOTAL FINANCED BY REA	6,959,016	2,262,086	671,714
TOTAL OH COST	9,317,528	3,173,622	883,975
TOTAL ORIGINAL COST	6,198,845	1,932,173	708,668
TATAL FINANCED BE REA	3,618,683	1,241,449	175,307
SAVINGS WITH OH	3,340,333	1,020,637	498,408

CABREPLA

CABLE REPLACEMENT 1/0 CABLE

23-Aug-88

	1972			1976			1977			1978	
1	2	3	1	2	3	1	2	3	1	2	3
41.06	2.37	4.71	53.23	11.08	26.34	81.02	19.56	31.29	77.61	10.6	97.11
504,258	66,360	151,130	653,718	310,240	845,172	995,007	547,680	1,004,002	953,128	296,800	3,115,969
225,460	26,027	77,588	292,286	121,681	433,899	444,881	214,808	515,440	426,157	116,409	1,599,693
278,797	40,333	73,542	361,432	188,559	411,273	550,126	332,872	488,562	526,972	180,391	1,516,276
450,798	35,550	96,781	584,412	166,200	541,234	889,519	293,400	642,947	852,080	159,000	1,995,416
225,460	26,027	77,588	292,286	121,681	433,899	444,881	214,808	515,440	426,157	116,409	1,599,693
225,337	9,523	19,193	292,126	44,519	107,335	444,638	78,592	127,507	425,924	42,591	395,723
53,460	30,810	54,349	69,305	144,040	303,937	105,488	254,290	361,055	101,048	137,800	1,120,552

Fig. 13

YEAR	1968			1969			1970			1971		
PHASE	1	2	3	1	2	3	1	2	3	1	2	3
MILES	0	0	0	0	0	0	0	0	0	0	0	0.28
URD	0	0	0	0	0	0	0	0	0	0	0	8,984
ORIG COST												7,939
FIN												1,046
OH	0	0	0	0	0	0	0	0	0	0	0	5,753
ORIG COST												7,939
FIN												0
SAVINGS	0	0	0	0	0	0	0	0	0	0	0	3,231

	ALL CABLE	YEARS 70-71-72-77	YEARS 70-71-72-77 JUST 3Ø
TOTAL URD COST	3,251,007	46,247	46,247
TOTAL ORIG COST	1,833,399	28,920	28,920
TOTAL FIN REA	1,417,608	17,327	17,327
TOTAL OH COST	1,822,265	26,632	26,632
TOTAL ORIG COST	1,833,399	28,920	28,920
TOTAL FIN REA	0	0	0
SAVINGS WITH OH	1,428,742	19,615	19,615

	1972			1976			1977			1978	
1	2	3	1	2	3	1	2	3	1	2	3
0	0	0.65	0.61	0	12.01	0	0	0.09	0.3	0	51.33
0	0	32,731	10,239	0	604,764	0	0	4,532	5,036	0	2,584,722
		18,429	5,765	0	340,520	0	0	2,952	2,835	0	1,455,359
		14,301	4,474	0	264,244	0	0	1,980	2,200	0	1,129,363
0	0	18,339	5,737	0	338,850	0	0	2,539	2,821	0	1,448,225
		18,429	5,765	0	340,520	0	0	2,552	2,835	0	1,455,359
		0	0	0	0	0	0	0	0	0	0
0	0	14,392	4,502	0	265,913	0	0	1,993	2,214	0	1,136,498

Fig. 14

SUMMARY OF CABLE REPLACEMENT

	ALL CABLE			YEARS 70-71-72-77			YEARS 70-71-72-77 JUST 3ø		
	URD	OH	SAVINGS	URD	OH	SAVINGS	URD	OH	SAVINGS
1/0	13,157,861	9,817,528	3,340,333	4,194,259	3,173,622	1,020,637	1,380,383	883,975	496,408
#2	846,255	725,196	121,059	203,682	176,170	27,512	0	0	0
4/0	3,251,007	1,822,265	1,428,742	46,247	26,632	19,615	46,247	26,632	19,615
TOTAL	17,255,123	12,364,989	4,890,135	4,444,188	3,376,423	1,067,765	1,426,630	910,607	516,023

Fig. 15

CABREPLA CABLE REPLACEMENT 25-Aug-88

	URD	OH	PRESENT
DEPRECIATION RATE	0.0427	0.0375	0.028
INTEREST RATE			0.06
KWH SALES			350,000,000
URD REPLACEMENT COST			17,255,123
URD PLANT RETIRED (CASH FROM GEN FUNDS)			8,214,220
NET URD PLANT ADDED			9,040,904
OH REPLACEMENT COST			12,364,989
URD PLANT RETIRED (CASH FROM GEN FUNDS)			8,214,220
NET OH PLANT ADDED			4,150,769
SAVINGS			4,890,135

	URD @ 2.8%	OH @ 2.8%	URD @ 4.27%	OH @ 3.75%
DEPRECIATION	253,145	116,222	386,047	155,654
INTEREST	1,035,307	741,899	1,035,307	741,899
COST	1,288,453	858,121	1,421,354	897,553
COST IN MILS/KWH	3.68	2.45	4.06	2.56
SAVINGS IN MILS/KWH		1.23		1.50

Fig. 16

CABLE REPLACEMENT

	URD	OH	PRESENT
DEPRECIATION RATE	0.0427	0.0375	0.028
INTEREST RATE			0.06
KWH SALES			350,000,000
URD REPLACEMENT COST			17,255,123
URD PLANT RETIRED (CASH FROM GEN FUNDS)			8,214,220
NET URD PLANT ADDED			9,040,904
OH REPLACEMENT COST			12,364,989
URD PLANT RETIRED (CASH FROM GEN FUNDS)			8,214,220
NET OH PLANT ADDED			4,150,769
EMERGANCY MTC URD '87			164,000
SAVINGS			4,890,135

	URD	OH	URD	OH
DEPRECIATION RATE	@ 2.8%	@ 2.8%	@ 4.27%	@ 3.75%
DEPRECIATION	253,145	116,222	386,047	155,654
INTEREST	1,035,307	741,899	1,035,307	741,899
EMERG MTC '87	(164,000)	(164,000)	(164,000)	(164,000)
COST	1,124,453	694,121	1,257,354	733,553
COST IN MILS/KWH	3.21	1.98	3.59	2.10
SAVINGS IN MILS/KWH		1.23		1.50

Fig. 16A

NRECA PROGRAMS AND EMPHASIS

Dr. Greg Boudreaux, Manager
Board & Management Development
NRECA

Management Services Update: Discussed the Advanced Management Program. Participants will be asked to bring practices, policies, handbooks, and related documents. Will be taught how to audit themselves. This should result in bringing the consultant approach to a training situation.

RECNET Update: Presently have 300 subscribers (goal to reach all 1,000 systems). It is important to take programs to participants instead of vice versa (same time, money, etc.).

Attorney Bill Crisp will be teaching a 10-part series where he explains legal concepts, members' rights and duties, bylaws, etc. This could be long term training for future directors.

Peter Drucker will do a seminar in November. It will be an on-the-air panel and will address employee-staff-manager relationships.

Suggested that possibly Bob Bergland could do twice a year updates utilizing RECNET.

It was pointed out there was a need for a basic electricity course as a part of new employee orientation. Harold Smith, Flint EMC, reported he teaches a 40-hour in-house training program at his cooperative each year for supervisors.

Dr. Boudreaux shared he has noted an increasing concern on the part of employees concerning the future of electric cooperatives. We need to help employees understand that future of electric cooperatives is in their hands. We need to be realistic and target more realistic messages to our employees.

MANAGEMENT SERVICES UPDATE

- **ADVANCED MANAGEMENT PROGRAM:**

  Human Resources Auditing (e.g., employment practices, affirmative action plan, policies)

- **POSSIBLE FINANCIAL OPERATIONS AUDITING IN FUTURE PROGRAMS**

- OTHER NEW PROGRAMS:
  - -- 544, Rates
  - -- Service Excellence Series (131, 431, 531)
  - -- Financial Decision Making and Laptops
  - -- Integrated G&T Programs
  - -- Financial Forecasting
- NEW STAFF (ROB CHURCH) AND INTEGRATION WITH AHP

RECNET UPDATE

- o HEALTH & WELLNESS (RS&I DISCOUNT)
- o CRISP: COOPERATIVE LEGAL SEMINAR
- o DRUCKER IN NOVEMBER
- o LOSS CONTROL MANAGEMENT (DEC.)
- o APPRENTICE LINEMAN SERIES (1990)

RECNET UPDATE (cont'd)

- o BERGLAND UPDATES
- o FUTURE GROWTH AND ISSUES
  - -- 1000 Systems
  - -- MUNIs
  - -- Telephone Co-ops
  - -- Other Co-ops & Understanding Finances
  - -- Links to the Community

LOSS CONTROL MANAGEMENT: TECHNIQUES THAT CAN BENEFIT YOUR SYSTEM AND SAVE YOU MONEY

DESCRIPTION: A 60-120 minute RECNET program on loss control management, including the needs to build board support, to define the role of the Loss Control Specialist, to develop effective reporting systems, and to implement procedures that enhance safety and loss control awareness at the local level.

The program will have two parts. The first, briefer part is intended to be recorded and shown at board meetings, and will present legal and financial information directors need to know about loss control management and why it is increasingly important. The second part of the program is intended for managers and all employees, and presents detailed techniques useful in implementing and managing a loss control system.

KEY THEMES AND ISSUES:

PART I. THE ROLE OF THE BOARD AND MANAGEMENT IN LOSS CONTROL

A. Some recent legal cases and results
B. Financial considerations in loss control
C. The need for a board policies and what directors should look for in monthly and yearly reports
D. The importance of safety accreditation

PART II. MANAGING AND IMPLEMENTING EFFECTIVE LOSS CONTROL

E. Managing the loss control function: The need for individual responsibilities:
    1. The traditional Safety Coordinator and the new need for a Loss Control Specialist
    2. What is loss control?
    3. Safety and Loss Control and the focus on the overall system: employees, members, and the public
    4. The need for a direct reporting relationship to the general manager
    5. Additional training needs for the Loss Control Specialist
F. Safety data bases--what system and statewide data bases can show
G. Building employee awareness and committment
    1. Hazard awareness
    2. The role of the Loss Control Committee in investigating all accidents and hazards
    3. Techniques for motivating employee involvement
    4. Personnel policies that identify consequences of safety violations

Attachment A

A POSSIBLE CURRICULUM

1. Being a Lineman: Tools, rigging and climbing
2. Basic electricity
3. Mathematics for the lineman
4. Power use and street lighting
5. Substations
6. Underground distribution
7. Transformers
8. Overvoltage/overcurrent protection devices
9. Live-line maintenance
10. Voltage regulation/capacitor banks
11. Test meters
12. Watt-hour meters
13. Staking and mapping

MARKETING PRINCIPLES

Course 430.2

Presented by

National Rural Electric Cooperative Association

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CFC UPDATE - PROGRAMS AND ACTIVITIES

Gary Gordy
Assistant to the Governor
and
Jim Hubbard, Director
Marketing & Organizational Relations

Gary Gordy:

- Annexation - one of top three problems - others are bankruptcy and rate disparity.

- Integrity Fund - 21 grants have been made, most in defense of annexation. There are a lot of struggles on the part of small independent cooperatives (only the large ones make the papers - do not hear much about the small ones). There is some legislative action in some states to resolve problems - this is only a stopgap measure.

- CFC and NRECA hope to help resolve the problem - there is no congressional solution. We cannot stop annexation. We must learn to live with it. We cannot be on a constant colision course with municipals.

- "If you ain't the lead dog, the scenery never changes."

- CFC presently involved in massive research project - using laptop computers. Have won some important lawsuits - lost some important lawsuits.

- Statewide managers will be receiving a relatively complex questionnaire from CFC. This will help assess the dimensions of the programs and come up with solutions for annexation problems and how to survive after. Should be able to take this information and arrive at an implementation plan. "Must stop the trench warfare."

- War of attrition - how much will it cost to protect your territory?

- Criteria for receiving funds from integrity fund - if you can prove you have a case. Many systems can get up to 10% of present fund.

- CFC and NRECA jointly planning a "future directions seminar."

Jim Hubbard:

- Discussed programs CFC offers.

- Commended REMDC - this group has been on the "cutting edge" of new management techniques over the years.

- Cost for borrowing money for past 24 months from CFC looks good.

- Key issues "bugging" competition: 1) too risky for IOU's to build power plants; 2) demand uncertainties; 3) economics of power generation.

- Marketing and cost containment is the key.

- Acquisitions and mergers - a lot going on in this area - expanding power sales.

CFC Update (Continued)

- o Working on set of tools to be made available to individual systems to help fulfil their responsibilities.

- o We feel we must be a part of the leadership in our community. Electric cooperatives need to be in the forefront of what goes on in their communities. Provide leadership where there is none.

Term Sheet

For

Water & Sewer System Long-Term

Loan Program

AVAILABILITY - Available to Associate Members of CFC.

PURPOSE - To provide financing or refinancing of physical assets in connection with water and sewer projects predominantly located within the service area of the sponsoring system where the financing of such projects is expected to increase the energy sales potential of the system and improve the economic well-being of the area.

LOAN AMOUNT - As required, providing the equity requirements, guarantee(s) of debt repayment and the historic and/or prospective financial performance criteria are met as hereinafter described.

TERM - Up to 15 years without a guarantee. Up to 30 years with a guarantee. In any event, the term of the loan shall not exceed the expected remaining useful life of the asset being financed. Such determination may require the written opinion of a professional engineering firm.

AMORTIZATION - Level debt service or level principal plus interest beginning with the first full billing cycle following the first advance of funds.

GENERAL CONDITIONS - The following conditions must be met by the water or sewer system for which the application is being made:

A. A loan without any guarantee or with only a partial guarantee if the water or sewer system meets the following criteria:

   1. Equity of 30 percent or greater; and

   2. A Times Interest Earned Ratio (TIER) of 1.00 for each of the last two years, and a projected TIER of 1.0 for each of the succeeding two years; and

   3. A Debt Service Coverage Ratio (DSC) of 1.25 for each of the last two years, and a projected DSC of 1.25 for each of the succeeding two years; and

4. System agrees to build a debt service reserve with a trustee over a five year period equal to one year's debt service.

E. A loan with a 100 percent guarantee of payment of debt service if the water or sewer system meets the following criteria:

1. A projected TIER of 1.0 for each of the succeeding two years; and

2. A projected DSC of 1.15 for each of the succeeding two years.

PREPAYMENTS/RECISSIONS - Subject to a fee.

FINANCIAL FORECAST - At the time of the application, the system must submit a financial forecast, including net cumulative cash flows for a period of 5 years and the assumptions use in the development of such a forecast. An updated 5-year financial forecast must be submitted on an annual basis.

ENGINEER'S CERTIFICATES - At the time of the application, the system must submit an engineer's certification as to the condition of plant and any substantive improvements that may be required during the next 5 years. Such certification will be required on an annual basis thereafter, including estimated capital requirements for the ensuing 5 year period.

AUDITED FINANCIAL STATEMENTS - A set of audited financial statements must be submitted with the application for the two preceeding years, if an existing entity.

Term Sheet

For

Economic and Business Development Long-Term

Loan Program

AVAILABILITY - Available to Associate Members of CFC.

PURPOSE - To provide supplemental financing for physical assets in connection with economic and business development projects located within the system's service area designed to increase the sale of electric energy and to improve the economic well-being of the area.

LOAN AMOUNT - As required, providing at least 30 percent of the total project cost includes equity from sources other than CFC including grants from Federal, State or Regional sources and that local or regional bank(s) are participants as hereinafter described.

CFC EQUITY REQUIREMENT - 10 percent of loan amount. This equity requirement is in connection with the CFC loan and is not a part of the project requirement.

PURCHASE OF EQUITY - The 10 percent Loan Capital Term Certificate (LCTC) will be purchased with each long-term loan advance as a part of the advance in an amount equal to 10 percent of each advance of fund amount. Such LCTC's are non-interest bearing and will mature at the time the loan with which they are associated is fully amortized.

SECURITY OF ASSOCIATE MEMBER - A first mortgage on the project assets. The mortgage may be shared, if required. The first mortgage debt of the project cannot, however, exceed 70 percent of the total project cost. In addition, the CFC loan amount must be guaranteed by the sponsoring Class A or B CFC member to the extent permitted by the sponsoring members financing arrangements.

AMORTIZATION - Level debt service or level principal plus interest beginning with the first full billing cycle following the first advance of funds. Interest only payments for up to 24 months on a case by case basis depending upon project viability.

PREPAYMENTS/RECISSIONS - Subject to a fee.

INTEREST RATES - Associate Member variable rate or a fixed rate based on matched funding costs as available.

PATRONAGE CAPITAL - Allocated on an annual basis and retired on CFC's announced rotation cycle. Any patronage capital retired will first be applied toward any loan balance outstanding.

GENERAL CONSIDERATIONS OF LOAN APPROVAL - This loan program is intended only to provide a portion of the funds. The nature of this type of financing mandates that CFC must be satisfied that:

1. The project is a community wide or area integrated project. There must be evidence of cooperation and support of appropriate bodies politic (e.g. city council, zoning board, planning commission, taxing authorities, etc.) and local financial institutions(s).

2. A project study must be submitted including net cumulative cash flow projections for the term of the loan. The study must indicate financial feasibility based on clearly defined assumptions satisfactory to CFC.

3. Loan approval and advance of funds will be dependent in part upon the credit quality of the other participants. Commitments of all project participants must be in place.

4. A local or regional bank(s) would normally be expected to lend an amount representing a fair proportion of the total debt. The rationale for such a condition is based on the premise that any project a local or area lender refuses to participate in for the benefit of the community or area it serves cannot be supported by an absentee lender such as CFC.

REMDC TODAY - WHERE ARE WE?
WHY ARE WE? WHO ARE WE? HOW ARE WE?

Jim Kiley, General Manager
Sioux Valley Empire, South Dakota

- Remembered the early days of this organization. The first meeting was held in Kansas City in 1958. Eric Nichol and Tom Nelson were consultants at the time and assisted with organizing this group. Gave input to first management and director institute manuals. Individuals who had primary responsibility for management training and employee development attended. Those who were seriously trying to apply methods of modern management.

- Objective was to be a test group. Members of this group have been involved in key activities such as long range study committee. Assisted with drafting of objectives of CFC and a management evaluation guide. This was given to NRECA for use around the country.

- Quality of participation was important - not quantity. Key ingredient - those who were willing to actively participate and attend these meetings. Those who were constantly seeking management improvement methods for their cooperatives.

- Problems electric cooperatives face are unique. People are looking at the program as one that may not be here too much longer.

- In the early years, the program was a "movement" - has now evolved into institutions with different needs, etc.

- "What's in it for me" attitude.

- Peter Drucker said most associations like ours last only 40 years.

- Feels this group has real opportunity - how can we be more effective?

- What should we be giving our primary attention to in the future? Which direction should we go?

- REMDC has no hidden agenda. Group is more diverse now than in the beginning.

- CFC staff appreciates this group (REMDC) - would like to hear more from this group.

NONTRADITIONAL IDEAS

Bill James, General Manager
Northeastern REMC

- "Rurban" (combined urban and rural).
- On his system, 50 large power accounts provide 40% of revenues.
- "Member relations" = "consumer services."
- By year 2000, 8 out of 10 jobs will be filled by women or minorities.
- Community rooms - do you still use them? His cooperative has problem with members or groups not taking care of property. Most said their community rooms used for special functions only.
- Good PR to work with local IOU - co-sponsor events with IOU. Hold joint meetings to discuss services provided by both.
- He meets monthly with IOU manager to talk about things. Real competition is gas, oil, etc.
- Small business incubator - over 400 businesses incubated since 1983.
- Cooperatives need good communications person.
- Load management - be prepared to answer questions. Some will want to participate who are not eligible. His cooperative gives away water heaters - member must have control device.
- Phone notification system - limited only by your own imagination. Use pre-recorded messages. Dial in to learn about annual meeting.
- His cooperative working with IOU in serving a new shopping center.

RURAL ELECTRIC MANAGEMENT DEVELOPMENT COUNCIL

Fargo, North Dakota

May 16, 1989
Dan Kessler

GOOD AFTERNOON! I APPRECIATE VERY MUCH BEING ASKED TO SPEAK TO THIS GROUP THIS YEAR... EVEN THOUGH MY TOPIC... EFFECTIVE MEMBER CONTACTS AND COMMUNICATION... IS SOMETHING I'M SURE EACH OF YOUR SYSTEMS ARE DOING,... AND DOING QUITE WELL! WHAT DOES MEMBER CONTACTS MEAN TO YOU?... (PAUSE)... WHAT IS YOUR DEFINITION OF COMMUNICATION?... (PAUSE) ... MY REMARKS TODAY WILL CENTER AROUND "WHAT MEMBER CONTACTS AND COMMUNICATION MEANS TO WELLS RURAL ELECTRIC.

MEMBER CONTACTS TO ME... MEANS... GETTING OUT OF THE OFFICE AND MAKING FACE-TO-FACE... ONE-ON-ONE... UP-FRONT AND PERSONAL CONTACT WITH THE PEOPLE WE SERVE... COMMUNICATION HAS MANY DIFFERENT DEFINITIONS .... I THINK IT ONLY MEANS, WHAT IT MEANS TO THE OTHER PERSON YOU'RE TALKING TO...

SOMETIMES OUR PERCEPTION IS THAT,... "WE ARE DOING EVERYTHING WE CAN TO IMPROVE OUR COMMUNICATION EFFECTIVENESS, WHEN IN REALITY WE MIGHT NOT BE LOOKING AT IT CLEARLY ENOUGH... (AN EXAMPLE)... WHEN I CAME INTO THE AIRPORT ON SUNDAY EVENING... A GENTLEMAN AT THE BAGGAGE CLAIM AREA ASKED ME WHERE I WAS FROM?... I SAID "NEVADA"... PROUDLY... HE WENT ON TO TELL ME ABOUT THE TWO GUYS FROM NEVADA WHO HAD COME TO NORTH DAKOTA TO DO SOME ICE FISHING... IT WAS NEARLY DARK WHEN THEY ARRIVED, SO THEY GOT ALL THEIR GEAR OUT AND DECIDED TO CUT A HOLE IN THE ICE TO BE READY FOR THE NEXT MORNING... AS THEY TOUCHED THE ICE WITH A SAW... A VOICE CAME OUT OF THE DARK.. "THERE ARE NO FISH UNDER THE ICE"... THEY LOOKED AT EACH OTHER, AND WERE SURE THEY DIDN'T HEAR ANYTHING SO THEY STARTED TO CUT AGAIN... AS THEY DID THE VOICE CAME LOUDER... "THERE ARE NO FISH UNDER THE ICE"... THIS TIME THEY WERE SURE THEY HEARD SOMETHING SO THEY PICKED UP THEIR STUFF AND MOVED

ABOUT FIFTY YARDS DOWN THE ICE... AGAIN THEY STARTED TO CUT A HOLE... WHEN THE VOICE CAME EVEN LOUDER... "THIS IS THE RINK MANAGER... THERE ARE NO FISH UNDER THE ICE"....

I'M NOT SURE WHETHER THE "NEVADAN'S" DIDN'T LOOK CLEARLY ENOUGH,..... MISSED THE COMMUNICATION, OR THIS WAS JUST A TYPICAL NORTH DAKOTA "WELCOME"... HOWEVER, I DO INTEND TO RETELL THE STORY... BUT WITH A LITTLE DIFFERENT GEOGRAPHY...

CHILDER'S LAW SAYS... "WHEN EVERYTHING IS PERFECTLY CLEAR TO EVERY-ONE... SOMEBODY DIDN'T GET THE MESSAGE!... WHAT IS THE MESSAGE THAT WE WANT TO BRING TO THE MEMBERS IN OUR CONTACTS WITH THEM?..... THE MESSAGE IS OBVIOUSLY THE INFORMATION WE WANT THEM TO KNOW! FOR WHATEVER THE REASON...!!!

WELLS RURAL HAS BEEN ONE OF THE FASTEST GROWING COOPERATIVES IN "PLANT GROWTH" THESE PAST FEW YEARS... WE'VE INCREASED FROM SLIGHTLY OVER $5 MILLION... YEAR-END 1981... TO NEARLY $35 MILLION YEAR-END 1988... GOLD MINING AND CASINO RELATED INDUSTRY HAVE BEEN THE MAJOR CONTRI-BUTORS TO AN INCREASE IN KILOWATT-HOUR SALES OF OVER 400%,.. DURING THAT SAME PERIOD OF TIME..... I DON'T MENTION THIS TO ESPECIALLY "CROW" ABOUT THE HAPPENINGS AT OUR CO-OP... BUT TO EMPHASIZE THE IMPORTANCE OF <u>OUR</u> CONTACT AND COMMUNICATION EFFORTS... AND WHY... IN <u>ALL OUR</u> SITUATIONS... WE MUST CONSTANTLY STRIVE TO GET INFORMATION TO OUR MEMBERS... ON A TIMELY BASIS!..... WE ALL KNOW

COMMUNICATION IS NOT A "ONE-WAY" TRANSACTION. WE NEED FEEDBACK TO GENERATE QUESTIONS OR COMMENTS..... JUST AS IMPORTANT AS BRINGING INFORMATION TO OUR MEMBER/ OWNERS... IS LISTENING..... TO WHAT THEY HAVE TO SAY TO US!!!! IT MAY BE THAT LISTENING TO THE MEMBERS IS EVEN MORE IMPORTANT THAN SHARING INFORMATION WITH THEM...

LISTENING!!!... YOU'VE HEARD THE STORY THE MAN WHO WALKED UP TO THE IMPOSING HOME AND ASKED THE LADY FOR A JOB TO EAT A HOT MEAL... "IT JUST SO HAPPENS THAT I HAVE TWO GALLONS OF GREEN PAINT," SHE SAID. "IF YOU'LL PAINT THE PORCH OUT BACK, I'LL SEE THAT YOU HAVE ALL THE DINNER YOU CAN EAT."..... TWO HOURS LATER THE MAN REAPPEARED AT THE DOOR. "WELL,... I FINISHED THE JOB. BUT THAT'S NO PORCHE, LADY; IT'S A FERRARI!"..... LISTENING!!!... MOST OF US ARE SENDING OUR MEMBER NEWSLETTERS... DOING NEWS RELEASES... MONTHLY MAGAZINES... AND THESE ARE TERRIFIC WAYS THAT WE ALL USE TO GET THE INFORMATION OUT!!... BUT WHERE'S THE FEEDBACK THE MEMBER'S OPPORTUNITY TO TALK.... WHILE WE LISTEN?!?!

AT WELLS RURAL ELECTRIC, WE HAVE A PROGRAM THAT I'M SURE MANY OF YOU HAVE BEEN DOING FOR SOME TIME..... IT TOOK US A LITTLE LONGER TO FIGURE OUT THE BENEFIT...

WE SET A QUOTA... MINIMUMS... OF "FACE-TO-FACE... ONE-ON-ONE" MEMBER CONTACTS TO BE MADE EACH MONTH BY OUR STAFF. MY QUOTA AND THE MANAGER OF MEMBER SERVICES QUOTA, IS TWICE THE REQUIREMENT OF THE THREE OTHER

STAFF MEMBERS... WE GET OUT AND ASK THE BASIC QUESTIONS LIKE... (1) WHAT ARE WE DOING WELL?..... (2) HOW COULD WE SERVE YOU BETTER?..... (3) WHAT OTHER SERVICES COULD WE PROVIDE YOU WITH... NOW... OR IN THE FUTURE?.... OF COURSE ONCE WE'RE THERE WITH THEM, IT GIVES THEM AN OPPORTUNITY TO ASK US THE QUESTIONS THAT NEVER GET ASKED WHEN THEY STOP BY TO PAY THE BILL OR WHEN THEY'RE AT THE ANNUAL MEETING, BECAUSE NOBODY ELSE IS ASKING ANY QUESTIONS!!!!...

I THINK BUILDING OF MEMBER RELATIONSHIPS, THROUGH THESE MEMBER CONTACTS, HAS IMPROVED DRAMATICALLY BECAUSE OF THIS VERY SIMPLE EFFORT..... WHEN WE FIRST STARTED THE CONTACTS.... THE MEMBERS WERE SURPRISED TO SEE US... SURPRISED THAT WE REALLY SEEMED TO CARE ABOUT THEM AND WHAT THEY FEEL..... NOW WE ARE GETTING REFERRALS... WORD OF MOUTH INFORMATION... AND FOR ONCE.... WE FEEL WE HAVE A HAND IN STARTING THE GOSSIP THAT GOES AROUND ABOUT US..... NO PROGRAM LIKE THIS CAN PROSPER WITHOUT THE SUPPORT OF THE BOARD OF DIRECTORS.... AND THE DEDICATION OF NOT JUST THE STAFF.... BUT ALL EMPLOYEES!!! WE ARE FORTUNATE AT WELLS RURAL TO HAVE BOTH!!!!

IN PREPARING THESE REMARKS,... I SEEMED TO BE LOOKING FOR SOME MAGICAL FORMULA TO SHARE WITH YOU IN MAKING EFFECTIVE CONTACTS.... IT BECAME QUITE CLEAR THAT THERE REALLY ISN'T ANY MAGIC,... BUT A COMBINATION OF THINGS THAT HAVE COME TOGETHER WELL FOR US..... WE BELIEVE IN THE TEAM GAME!!!... WE WORK WELL TOGETHER BECAUSE WE'VE GOT THE BEST JOB AROUND..... WE LIKE EACH OTHER..... AND WE LOVE WHAT WE DO FOR THE

OWNERS OF THE COOPERATIVE..!!!.. (YOU KNOW..... WE SPEND MORE TIME TOGETHER DURING THE WAKING HOURS OF A WORK WEEK THAN WE DO WITH OUR FAMILIES!!!!!) THERE'S A LOT OF EXCITEMENT AT WELLS RURAL....

A WHILE BACK WE DECIDED TO KEEP RECORDS ON HOW MANY MEMBERS PAID THEIR BILL IN PERSON IN OUR OFFICES..... TO OUR SURPRISE!!!!.... 7 OUT OF 10 MEMBERS PAY THEIR BILL IN THE OFFICE.... WHAT AN OPPORTUNITY TO MAKE EFFECTIVE CONTACTS, WHEN WE DON'T HAVE TO EVEN LEAVE THE OFFICE TO DO SO.....

I'M NOT SURE THAT OUR COOPERATIVE HAS MANY MORE CREATIVE OR INNOVATIVE IDEAS ON BUILDING MEMBER RELATIONS THAN MANY OF YOU HAVE..... IN FACT.... WE MAY HAVE BORROWED FROM YOU!!!! I DO KNOW (AS I SAID EARLIER) THAT THE MOST IMPORTANT THING IN MAKING MEMBER CONTACTS IS THE INFORMATION WE'RE SHARING...!!!

I'D LIKE TO SHARE A FEW THINGS THAT WE ARE DOING THAT SEEM TO HELP THE "INFORMATION FLOW" AT OUR COOPERATIVE.....

<u>EMPLOYEE MEETINGS:</u>

WE ADOPTED FOUR YEARS AGO... A FORMAT WHEREBY EACH EMPLOYEE, OR DEPARTMENT OF EMPLOYEES, SHARE WITH ALL OF US... WHAT THEY DO IN THEIR JOB AT WELLS RURAL... THESE EMPLOYEE FEATURES HAVE GREATLY INCREASED EVERYONE'S KNOWLEDGE OF WHAT EACH OF US DO DAY TO DAY... AND

STRENGTHENED WHAT I CERTAINLY BELIEVE... THAT IS ..... IT TAKES EACH ONE OF US DOING OUR JOB IN ORDER FOR THE SERVICE TO BE PROVIDED OUR MEMBERS. AT THESE MEETINGS, I ALSO REVIEW EVERYTHING I CAN FROM..... NEW BOARD POLICY OR DECISIONS.... TO PLANNING AND STRATEGIES. WE HAVE FEEDBACK,..... LISTEN TO EACH OTHER..... AND OUR EMPLOYEES SEEM TO FEEL MUCH BETTER KNOWING THE DETAILS OF OPERATING THE COMPANY.... AGAIN,... HOW CAN WE BUILD EFFECTIVE RELATIONSHIPS WITH OUR MEMBERS... UNLESS WE FIRST BUILD THEM WITH OUR EMPLOYEES....

ANNUAL MEETINGS:

OUR ANNUAL MEETING IS MUCH MORE THAN A BUSINESS MEETING... IT'S ALSO AN ENERGY FAIR ENVIRONMENT FEATURING ENERGY RELATED DISPLAYS AND BOOTHS AND DEMONSTRATIONS... AS WELL AS EXHIBITS FROM OTHER SERVICE AREA BUSINESSES OR INDIVIDUAL MEMBERS. WE ARE TOO SMALL TO HAVE SEPARATE MEETINGS FOR ALL OF US, SO WE TAKE ADVANTAGE OF BRINGING OUR MEMBERS TOGETHER FOR MORE THAN JUST ONE REASON. I THINK THE ENERGY FAIR ENVIRONMENT WORKS BEST BECAUSE WE'VE TAKEN THE POLITICS OUT OF THE MEETING..... OUR DIRECTOR ELECTIONS ARE DONE BY MAIL AND WE GET 5 TIMES THE BALLOTS RETURNED... THAN WE WOULD GET AT THE ANNUAL MEETING....

COMMUNITY MEETINGS:

THE STAFF AND MYSELF ATTEND MEETINGS IN SMALL RURAL COMMUNITY HALLS AN OUR AREA OFFICES AT LEAST ONCE ANNUALLY. OUR PROGRAM FEATURES IN-DEPTH REVIEW BY EACH DEPARTMENT HEAD AS TO WHAT WE'RE DOING SPECIFICALLY IN THE AREA WHERE THE MEETING IS HELD; AS WELL AS GENERAL "SERVICE AREA" WIDE PLANS, ACCOMPLISHMENTS, ETC.. THE PROGRAM ENDS WITH QUESTIONS AND COMMENTS AND ROUTINELY WITH COFFEE AND COOKIES, OR A POT LUCK DINNER.... PROBABLY A BIG REASON WHY THE STAFF WOULD LIKE TO HAVE THEM MORE OFTEN! ..... BUT AGAIN,... FACE-TO-FACE.... PERSONAL CONTACT.....

WE HAVE MEMBER AWARE GROUP MEETINGS THREE TIMES ANNUALLY THROUGHOUT OUR SERVICE AREA.... THE MANAGEMENT STAFF MAKES PRESENTATIONS ON TOPICS FROM RURAL ELECTRIC PROGRAM HISTORY; WELLS RURAL ELECTRIC HISTORY.... TO COVERING WHY IT TAKES 3 TO 5 LINEMEN TO DO ONE JOB. WE DISCUSS IN DETAIL OUR NEED FOR POWER REQUIREMENTS, FINANCIAL FORECASTS, AND COST OF SERVICE STUDIES,.... AS WELL AS, RATES.... WORK PLANS.... AND OUR BUDGET (WHICH WE DO QUARTERLY RATHER THAN ANNUALLY).

OUR ENERGY EXPERT PROGRAM PROVIDES INFORMATION ON EFFICIENT ELECTRICAL APPLIANCES AND USAGE... AS WELL AS LIFE COST ANALYSIS..... ENERGY AUDITS..... THE SUPER GOOD CENTS PROGRAM.... AND IRRIGATION SYSTEM, EFFICIENCY TESTING AND ANALYSIS.

WE BELIEVE, AS YOU ALL KNOW, THAT AN EFFECTIVE MEANS OF DEVELOPING MORE INTEREST FROM OUR MEMBERS, IS TO INVOLVE THEIR CHILDREN!!.... WE EVEN WRITE A SPECIAL ANNUAL REPORT FOR KIDS....

WE TAKE A VARIETY OF ENERGY PROGRAMS TO ALL OUR TOWN AND RURAL SCHOOLS ..... THESE PROGRAMS RANGE FROM SAFETY DEMONSTRATIONS,..... USAGE PROGRAM,..... POSTER CONTESTS,..... ELECTRIC SAFETY CHARADES..... TO AN ENERGY ANALOG COMPUTER DEMONSTRATION OF KNOWN RESOURCES AND DEMANDS FOR ENERGY..... WITH THE OUTCOME BEING..... HOW LONG CAN WE SURVIVE UNDER CHANGING ENERGY SITUATIONS?

THE BOARD OF DIRECTORS STARTED A "SCHOLARSHIP PROGRAM" TO REWARD A SERVICE AREA GRADUATING SENIOR WHO INTENDS TO PURSUE A VOCATIONAL OR TECHNICAL CAREER.... AND WE'VE PLAYED A PART IN HELPING FURTHER THESE STUDENTS EDUCATIONAL GOALS FOR NEARLY 18 YEARS NOW...

WE ARE VERY INVOLVED WITH NEVADA RURAL ELECTRIC ASSOCIATION <u>YOUTH ENERGY SEMINAR</u> .... WHICH IS HELD NEAR LAKE TAHOE FOR ONE WEEK EVERY SUMMER.... STUDENTS FROM NEVADA, UTAH, IDAHO, CALIFORNIA, AND OREGON.... FORM AND OPERATE THIS CAMP AS A <u>COOPERATIVE</u>. THEY ELECT A BOARD OF DIRECTORS, OFFICERS, AND GENERAL MANAGER THE FIRST DAY.... AND LEARN COOPERATIVE PRINCIPLES, AND DISCUSS ENERGY RELATED ISSUES..... THERE ARE SESSIONS ON PERSONAL INTERACTION..... COMMUNICATION..... INTERVIEWING, AS WELL AS A WEEK OF <u>FUN!</u>..... A

FAVORITE IS THE LEGISLATIVE ROLE-PLAY, WHERE THE STUDENTS (HIGH SCHOOL SOPHOMORES AND JUNIORS) PLAY THE ROLES OF LOBBYISTS, LEGISLATORS, ETC. AND DURING A MOCK SENATE PROCEEDING.... DEBATE 5 ENERGY RELATED BILLS..... A TERRIFIC WEEK FOR ALL INVOLVED..... OUR STUDENTS RETURN AND ADDRESS THE BOARD OF DIRECTORS AND ARE FEATURED AT THE ANNUAL MEETING.....

THINK SERVICE:

OUR NEWEST PROGRAM IS ONE WE CALL "THINK SERVICE"..... IT WAS SET UP AS AN EMPLOYEE RECOGNITION PROGRAM. OUR EMPLOYEES WEAR BUTTONS THAT SAY "THINK SERVICE"... IN EACH OF OUR OFFICES WE HAVE A POSTER/ SIGN DESCRIBING THE PROGRAM AND THROUGH OUR ADVERTISING AND "RETURN CARDS", WE ENCOURAGE THE MEMBERS TO... TELL US WHEN ONE (OR MORE) OF OUR EMPLOYEES MAKES AN EXTRA EFFORT IN PROVIDING SERVICE TO THEM..... (WHICH WE HOPE IS ALL THE TIME). WHAT STARTED AS AN EMPLOYEE RECOGNITION PROGRAM, HAS ALSO EVOLVED INTO A "COMMUNICATION" TOOL, AS THE MEMBERS ALSO USE THE "RETURN CARDS" TO SEND IN COMMENTS.

THERE ARE MANY GOOD THINGS HAPPENING IN THIS RURAL ELECTRIC PROGRAM.... BUT AS TO..... "HOW CAN WE BE EFFECTIVE IN OUR CONTACTS AND COMMUNICATION WITH OUR MEMBERS?" ..... I THINK IT'S SIMPLY .... STAY IN TOUCH..... GET OUT AND TALK TO OUR MEMBERS..... TALK TO OURSELVES (IN MEETINGS LIKE THIS)..... AND LISTEN TO

WHAT WE HEAR (THE GOOD LORD GAVE US TWO EARS... BUT ONE MOUTH... SO THAT WE MIGHT LISTEN TWICE AS MUCH AS WE SPEAK.....)..... MOST OF ALL..... COMMIT TO RESPONDING TO MEMBER NEEDS BEFORE THE MEMBER FEELS LIKE A PROBLEM EXISTS.

MEMBER RELATIONS IS A FAVORITE TOPIC OF MINE..... THE MOST REWARDING PART OF MY JOB..... IS BEING ABLE TO SIT DOWN WITH A MEMBER OR LEAN AGAINST THE FENCE..... AND DISCUSS WHAT'S REALLY GOING ON AT THE COOPERATIVE. THEY MAY NOT AGREE WITH EVERYTHING... BUT AT LEAST WE CAN TALK "EYE-TO-EYE" AND ANSWER ANY QUESTIONS THAT ARISE.....

I ENJOY MEETING WITH THIS GROUP ANNUALLY AND THANK YOU FOR LISTENING.. ... I LOOK FORWARD TO ANY QUESTIONS YOU MIGHT HAVE.....

MINUTES
1989 RURAL ELECTRIC MANAGEMENT DEVELOPMENT COUNCIL MEETING

The Rural Electric Management Development Council held its annual conference at the Holiday Inn, Fargo, North Dakota on May 15-17, 1989. Council chairman Harold Smith opened the meeting at 9:00 A.M. on Monday, May 15 and extended a welcome to those in attendance. The invocation was given by Mr. Smith.

Chairman Smith extended a welcome to all those in attendance with special recognition to those who were attending for the first time. Each person present introduced him/herself. (See registration list.)

Christine Beane was officially named as secretary to the Council.

Mr. Smith thanked Mike Gustafson, Cass County Electric Co-op., for making the arrangements and hosting the meeting. He especially expressed appreciation for the golf outing Sunday afternoon and the reception held Sunday evening, May 14. Mr. Smith expressed appreciation to Layton Wheeler, chairman of the Membership Committee, for his hard work and diligence in getting five new applications for membership to the Council. Wayne Johnson, chairman of the Research Committee, was also recognized for the good job this committee has done. Chairman Smith said the Council is "a forward-looking group" and the Research Committee has been instrumental in accomplishing this.

Mr. Smith recognized Paul Bienvenue, chairman of the Program Committee, for an overview of the program. Mr. Bienvenue stated program presenters for the first two days would be sharing innovative ideas from their cooperatives; reports would also be heard from NRECA and CFC staff. The Research Committee would have the entire program on Wednesday and would help the Council look at the "big picture" - what are we going to do in the future? How and if we are going to survive in the future? Alternatives? We are in a changing role in a changing economy. These are important issues that must be addressed.

Mike Gustafson announced arrangements had been made for a tour of his facilities at Cass County Electric on Tuesday afternoon. The majority of the group indicated they were interested in this tour.

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On Tuesday, May 16, 1989 Chairman Harold Smith convened the membership for the annual business session of the Council.

Chairman Smith said it had been a pleasure serving as chairman of this group for two years and he looked forward to his remaining year. He referred to proceedings of the previous year's meeting which included minutes of the business meeting. These were accepted by the group as mailed. Mr. Smith stated he appreciated the work Christine Beane and Blue Ridge had done over the years in preparing the proceedings of the meetings. In the future, each Council chairman will provide someone from his/her organization to serve as secretary.

Allen Ritchie, treasurer, was recognized for a report. The report covered the period of May 12, 1988 to May 10, 1989 and indicated reserve funds of $42,871.59. To date, 33 systems had paid current dues. There was a motion and a second and the treasurer's report was approved as presented.

Chairman Smith thanked Paul Bienvenue and the Program Committee for their hard work in putting together this year's program. Mr. Bienvenue stated he appreciated all those who were willing to be on the program this year and looked forward to good participation next year. He asked if anyone had program ideas or was willing to serve on the program next year to please contact him or a member of the Program Committee. Chairman Smith reminded the Council members that each cooperative needed representation on the program every three years.

Mike Gustafson, a member of the Nominating Committee, was recognized for a report. On behalf of the Nominating Committee, Mr. Gustafson made a motion that the following nominations be approved (nominees are underlined):

Officers	Chairman - Harold Smith	Term expires 1990
	Vice Chairman - Wayne Johnson	Term expires 1990
	Treasurer - Allen Ritchie	Term expires 1992
	Secretary - Christine Beane	Appointed annually
Program Committee		
	Chairman - Paul Bienvenue	Term expires 1992
	Dan Kessler	Term expires 1991
	Kim Colberg	Term expires 1990
	Dan Bryan	Term expires 1992
	Bob Roberts	Term expires 1992
Nominating Committee		
	Chairman - Mike Gustafson	Term expires 1990
	Ron Knouse	Term expires 1991
	Derl Hinson	Term expires 1992
	Bob Bauman	Term expires 1992
Membership Committee		
	Chairman - Layton Wheeler	Term expires 1990
	Jean Stansell	Term expires 1991
	Marlynn Cox	Term expires 1992
	Wayne Swann	Term expires 1992
Management Research Committee		
	Chairman - Joe Satterfield	Term expires 1990
	Paul Weatherby	Term expires 1991
	Doyle Hines	Term expires 1991
	Jim Kiley	Term expires 1990
	Wayne Johnson	Term expires 1992

There being no further nominations, the slate of candidates was approved as presented.

Layton Wheeler, chairman of the Membership Committee, was recognized for a report. He stated requests for recertification had been received from the following:

- Cobb EMC, Marietta, Georgia
- Guadalupe Valley, Gonzales, Texas
- Hancock-Wood, North Baltimore, Ohio
- Linn County, Marion, Iowa
- Shenandoah Valley, Dayton, Virginia

Randolph EMC was eligible for recertification but requested their membership be terminated for the time being. Mr. Wheeler stated his committee recommended that Davidson EMC, Four County EMC, and Union EMC be permitted to submit their recertification by mid-summer 1989 for Council approval at the 1990 meeting.

Mr. Wheeler stated applications for membership were received from the following systems:

- o Cap Rock Electric Cooperative, Stanton, Texas
- o Farmers Electric Cooperative, Chillicothe, Missouri
- o Washington Electric Cooperative, East Montpelier, Vermont
- o Jackson EMC, Jefferson, Georgia
- o Southern Maryland Electric Cooperative, Hughesville, Maryland

There was a motion by Bob Roberts, a second by Paul Bienvenue, and those for recertification and new membership were approved as presented by the Membership Committee.

Chairman Smith presented certificates to the new members as well as those approved for recertification. He thanked Mr. Wheeler for the excellent work of his committee this year. (See attached report from Membership Committee.)

Wayne Johnson, chairman of the Management Research Committee, was recognized for a report. Mr. Johnson said a good program was lined up for Wednesday with participation by Bob Schiller, NRECA; Carl Stover, consulting engineer; and Jim Hubbard, CFC. The program this year will deal with the changing economy and the changing role of electric cooperatives. Concern has been expressed this week about a changing of spirit, attitude, and approach. He said the Research Committee has a deep concern about what is happening to rural electric systems and feels there should be a continuation of study in these areas of concern and how these issues will be addressed.

On behalf of the Research Committee, Mr. Johnson recommended the Council approve as next year's project the continuation of this year's project with major consideration given in restructuring rural electric systems in the following areas: economic, financial, political, cultural, philosophical, and management. Approval was given to continue with this project and to use a consultant to interview the stockholders in the completed, planned, and/or under consideration mergers, consolidations, federations and vertical integrations; review reports on these situations and interview external experts. The consultant will be someone who is reasonably independent of the rural electric program. The estimated cost of this study will be $10,000. A motion was made by Mr. Johnson that the Council proceed with this project with a report to be given at the 1990 meeting; Jim Kiley seconded the motion and the motion carried.

Mr. Johnson stated we all have watched with interest mergers/consolidations and we have seen some disasters. When there is a common culture and philosophy, the merger is more manageable. Some mergers make economic sense, some do not.

Ron Knouse was recognized to present a proposal from Charlie Overman, who is with NRECA International Programs Division. Mr. Overman was seeking input and assistance from Council members to work with him in furthering the work of the International Programs Division by establishing a committee to function with IPD. Following discussion, the Council agreed to appoint a committee to work with NRECA personnel concerning this proposal. Serving on this committee will be Carl Sederlund, Ron Knouse, and Jim Kiley. This committee will explore the proposal presented by Charlie Overman and give feedback to the Council, NRECA and Mr. Overman. Several of the cooperatives represented had worked with IPD in the past and agreed it takes time and money to send staff on international assignments as well as working with those who visit our cooperatives from other countries.

Chairman Smith stated REMDC and specifically the rural electric industry had lost two pioneers during the past year. Barbara Deverick, an employee of Blue Ridge EMC for over 40 years, known nationally and internationally for her work with cooperatives, passed away on April 3, 1989. Ev Bristol, former manager of Yampa Valley EA, passed away March 14, 1989.

Several members present fondly remembered Barbara as a "spark for the entire rural electric program", as energic, helpful, a mentor, a believer in cooperative principles, positive in everything she did, selfless, and she exhibited a strong Christian faith. She touched many lives and, it was pointed out, a lot of thanks should go to Blue Ridge management for allowing her to flourish.

Ev Bristol was remembered as an active participant in the rural electric program. He worked a lot overseas and also made great contributions to the REMDC organization.

There was discussion concerning the format for this year's meeting (with the business session held on Tuesday as opposed to the last day of the meeting) and all agreed it had worked well.

The 1990 meeting will be held in Lake Tahoe with Wells Rural Electric, Dan Kessler, Manager, hosting the meeting. Dates for the meeting are Saturday, May 19 through Wednesday, May 23 with a reception to be held on Saturday evening, May 19 (Sunday will be a free day). The 1991 meeting will be in San Antonio, Texas.

Chairman Smith thanked Christine Beane for serving as secretary to the group. He also expressed appreciation to the program committee and all the participants. A special thanks was expressed to Mike Gustafson and Cass County EC for their hospitality.

There being no further business to come before the Council, Chairman Smith declared the meeting adjourned.

Respectfully submitted,

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Christine W. Beane, Secretary

Note: In special session on the last day of the conference, the Council agreed to send to NRECA Management Services the attached list of concerns and suggestions expressed by the Council members.

FLINT
ELECTRIC MEMBERSHIP CORPORATION
P. O. Box 308 • Reynolds, Georgia 31076-0308 • (912) 847-3415

July 5, 1989

Mr. Robert Kabat, Director
Management Services Department
National Rural Electric Cooperative Association
1800 Massachusetts Avenue, N.W.
Washington, D. C. 20036

Dear Bob:

The Rural Electric Management Development Council met in Fargo, North Dakota, May 15-17, 1989. At the general session of the Council, the following comments and suggestions were made by members. No attempt has been made to censor, expand or determine the specific circumstance which gave rise to the individual comments. In many cases, the topic came up several times during the course of the meeting.

Please have a "cool one" handy as you read these. Sip on it and ruminate on these questions: Is this really true? If it is, what can be done about it? And, if it is not true, why do these folks have this perception. All of us utilize our experience, no matter how limited, in developing our opinions and judgments. These faithful NRECA supporters have done the same. I know you will give them credit for their concern.

Please do not take them personally or negatively. They are what they purport to be: "comments and suggestions from some of the loyal NRECA supporters."

I am confident that everyone of our members, individually and as a Council, is willing to go the "extra mile" in making NRECA an even better instrument of the rural electric program than it already is.

a. Review, refine, and update the basic 10-key performance evaluation (four corporate areas and six operational areas). Council feels there has not been adequate follow-up in these areas.

   ISSUE: The Management Evaluation Manual has not been kept current nor has its use been promoted sufficiently.

b. Directors are not expected to develop expertise in operational areas, but rather in corporate areas (member relations, public relations, etc.). Suggest a more systematic approach in developing training programs for directors.

ISSUE: Directors are getting more involved in operational areas. We believe this is either being encouraged or at least not discouraged sufficiently in the various training programs and conferences.

c. Strive to create a better environment for directors and managers. Develop institutes for directors to train them as to what their job is and focus on what they are to do and how to measure performance.

ISSUE: As a follow-up to "b" above, directors are not being "focused" on their job of measuring performance. Help is needed.

d. Recognize NRECA staff is overloaded. The Council feels there should be more quality control in staff assignments (who teaches what).

ISSUE: NRECA quality and concern for the welfare of its staff in some instances are being sacrificed due to the pressure of the co-ops having too few dollars to meet too many needs.

e. Mindful of pressures that NRECA is under, members of Council would be willing to pay higher dues, if necessary, to achieve higher quality and continuity.

ISSUE: Response to "d" above, we are willing to pay more to maintain high quality and keep good people longer.

f. Suggest course for G&T directors and managers; i.e. the role of a G&T director who is also a cooperative manager. This person must wear "two hats" as these are two distinct entities. Point out the difference between a director of a distribution system and a director of a G&T in that his training and expertise at the distribution level can and in some cases is 180 degrees apart from his G&T directorship. For example, distribution directors have been taught of optimum equity provision and equity accumulation to that position for the distribution cooperatives; whereas, for the G&T cooperative this type of equity accumulation reasoning can lead to disastrous results.

ISSUE: The cooperative employee who is both manager and a G&T director needs help in identifying the roles and how to play them effectively.

g. With the advances in telecommunications, possibly there are more effective ways to serve the member systems and reallocate manpower. Use these technological advances to more effectively use present managers for disseminating information.

ISSUE: Telecommunications offer the opportunity to more effectively use our present manpower. We need to find the ways to do it.

h. Thoroughly critique format and streamline national meeting. Perhaps the monies used for this meeting could be used more effectively for something else.

ISSUE: The annual meeting, as it is presently done, no longer serves a valid purpose for the rural electric program. (May also wish scrutinize other meetings such as national accounting conference, national member service conference, etc.)

i. Look at the big picture - what are the major concerns and problems. As we diversify, it is harder to focus on what the real problems are.

ISSUE: In our rapidly changing environment, we need more leadership and help in seeing the big picture in terms of problems and concerns.

j. Council recognizes mergers/consolidations may be necessary to become and remain viable organizations. A new and enlightening perspective was presented by Bob Schiller at this year's conference. Urge NRECA staff to give more thought in these areas which guides each cooperative to fully examine the facts of mergers/consolidations and present effectively to memberships for decisions.

ISSUE: Considerable more light needs to be given to the many issues surrounding this topic. It is not a panacea, but may be the next problem we all must engage and wrestle.

k. A frequent issue arising in merger and consolidation studies is representation on power supply, state association, NRECA, and CFC boards of directors. A study of alternatives which could be recommended for use by these organizations should be conducted and disseminated throughout the RE program.

ISSUE: Some action should be taken to reduce the bases upon which mergers and consolidations are being rejected.

l. The question of annexation is one many systems will have to face in the future. The cooperatives do not want to fight with the municipals. Help cooperatives learn to work together and come up with equitable solutions.

ISSUE: Solving the annexation issue in an equitable and cooperative manner is vital to our program.

m. NRECA is to be commended for working with EEI on the ad campaigns and the achievements made in this area. Cooperatives should be involved and there should be some areas of commonality. The real competitor is propane and natural gas, not other IOU's.

ISSUE: Cooperation with EEI is a major first step in the right direction to build a stronger coalition for the future of our industry. Let's see more!

The REMDC urges you to receive these comments and suggestions in the spirit in which they are intended. It is imperative that we all work together for the good of all rural systems across the nation. Please feel free to contact me if you wish further information concerning any of these comments.

Sincerely,

Harold Smith, Chairman
Rural Electric Management
Development Council

HS:cwb

c Dr. Greg Boudreaux, NRECA
Mr. Gary Gordy, CFC

TREASURER'S REPORT

THE RURAL ELECTRIC MANAGEMENT DEVELOPMENT COUNCIL

OPERATING STATEMENT

May 12, 1988 to May 10, 1989

INCOME:	
1988 Dues (Schedule A) - 3	$ 900.00
1989 Dues (Schedule B) - 33	9,900.00
Interest from Investments	1,232.87
TOTAL INCOME	$12,032.87
EXPENSES:	
Council	
1988 Meeting	
Holiday Inn - Columbus, MS	$ 436.24
Presentation - Steven Krieger	258.00
Blue Ridge EMC - 1988 REMDC Proceedings	583.49
Total 1988 Meeting	$ 1,277.73
Other	
Hospice-Caldwald Co.-	
In Memorial - B. Deverick	100.00
TOTAL EXPENSES	$ 1,377.73
NET INCOME:	$10,655.14

* * * * * *

THE RURAL ELECTRIC MANAGEMENT DEVELOPMENT COUNCIL

SCHEDULE A

1988 Dues Paid After May 12, 1988		
Davidson EMC	5/26/88	$ 300.00
Four County EMC-NC	6/06/88	300.00
Northeastern REMC	6/06/88	300.00
Total		$ 900.00

SCHEDULE B

1989 Dues Paid as of May 10, 1989		
Adams EC	4/13/89	$ 300.00
Blue Ridge EC	4/24/89	300.00
Blue Ridge Mountain EMC	4/13/89	300.00
Brunswick EMC	--	--
Butler County REC	4/13/89	300.00
Caprock EC	3/27/89	300.00
Cass County EC	4/13/89	300.00
Central Area DP	4/24/89	300.00
Central Georgia EMC	4/24/89	300.00
Clark County REMC	4/13/89	300.00
Cobb EMC	5/09/89	300.00
Davidson EMC	4/24/89	300.00
Delaware EC	4/13/89	300.00
Flint EMC	4/13/89	300.00
Four County EMC-NC	5/03/89	300.00
Four County EPA-MS	4/24/89	300.00
Guadalupe Valley EC	4/24/89	300.00
Hancock-Wood EC	4/24/89	300.00
Jackson EMC	5/03/89	300.00
Johnson County EC	4/24/89	300.00
Lee County EC	4/24/89	300.00
Linn County	4/12/89	300.00
Lumbee River EMC	4/12/89	300.00
Maquoketa Valley REC	4/24/89	300.00
Morgan County (IN) REMC	4/12/89	300.00
Northeastern REMC	4/24/89	300.00
Northern EC	--	--
Pioneer REC	4/12/89	300.00
Randolph EMC	--	--
Shenandoah Valley EC	4/13/89	300.00
Sioux Valley Empire EA	4/24/89	300.00
Southeast Iowa EA	5/02/89	300.00
Southside EC	4/24/89	300.00
Union REA, Inc.	4/13/89	300.00
Verendrye EC	--	--
Walton EMC	--	--
Wells EMC	5/09/89	300.00
Yampa Valley EA	4/13/89	300.00
Total		$9,900.00

Grand Total (36) $10,800.00

* * * * *

THE RURAL ELECTRIC MANAGEMENT DEVELOPMENT COUNCIL

BALANCE SHEET

May 10, 1989

	5/10/89	5/12/88
ASSETS		
Current		
Cash in Checking Account	$ 8,459.55	$ 9,837.28
Investments - Savings Account	34,412.04	22,379.17
Total	$42,871.59	$32,216.45
MEMBERS' EQUITY		
Retained Earnings	$32,216.45	$29,387.95
Net Gain (Loss)	10,655.14	2,828.50
Total	$42,871.59	$32,216.45
	* * * * *	* * * * *

Respectfully submitted,

Allen R. Ritchie
Treasurer

RURAL ELECTRIC MANAGEMENT DEVELOPMENT COUNCIL

MEMBERSHIP COMMITTEE

1989 REPORT

COMMITTEE:

Layton Wheeler, Chairman
Delaware

Marlynn Cox
Four County
Mississippi

Jean Stansell/George Weaver
Central Georgia

Recertification was requested from six (6) members:

Cobb EMC
Marietta, Georgia

Guadalupe Valley
Gonzales, Texas

Hancock-Wood
North Baltimore, Ohio

Linn County
Marion, Iowa

Randolph EMC
Asheboro, North Carolina

Shenandoah Valley
Dayton, Virginia

Randolph EMC was the only member not returning the recertification application.

A telephone call was then made with the understanding that Randolph EMC wished to terminate its membership for the time being.

Membership invitations and/or meeting attendance was sent to the following:

Charles Staples, General Manager
Aiken Electric Cooperative, Inc.
P. O. Box 417
Aiken, SC 29801

Rick Newland, Manager
Anoka Electric Cooperative
2022 N. Ferry Street
Anoka, MN 55303

Richard Arnold, General Manager
Central Iowa Power Cooperative
G & T
P. O. Box 2517
Cedar Rapids, IA 52406

Donald J. VanDeest, Manager
Central Wisconsin Electric Co-op
P. O. Box 255
Iola, WI 54945

E. E. (Skip) Strickland, Manager
Berkeley Electric Cooperative
P. O. Box 1234
Moncks Corner, SC 29461

Charles E. Dalton, Manager
Blue Ridge Electric Cooperative
P. O. Box 277
Pickens, SC 29671

Doyle D. Marlett, Manager
Caddo Electric Cooperative
P. O. Box 70
Binger, OK 73009

David Pruitt, Manager
Cap Rock Electric Cooperative, Inc.
P. O. Box 700
Stanton, TX 79782

Gary M. Bullock, General Manager
Carroll EMC
P. O. Box 629
Carrollton, GA 30117

Randall Pugh, Manager
Jackson EMC
P. O. Box 38
Jefferson, GA 30549

James O. Baker, Manager
Middle Tennessee EMC
810 Commercial Court
Murfreesboro, TN 37130

Gerald W. Freehling, General Manager
Mitchell EMC
P. O. Box 409
Camilla, GA 31730

Grant J. Earl, General Manager
Moon Lake Electric Association, Inc.
P. O. Box 278
Roosevelt, UT 84066

William C. Phillips, Manager
Clay Electric Co-op, Inc.
P. O. Box 308
Keystone Heights, FL 32656

Dan Bryan, Manager
Farmer's Electric Co-op, Inc.
P. O. Box 310
Chillicothe, MO 64601

Derl Hinson
Executive Vice President
Georgia EMC
148 International Blvd., S-845
Atlanta, GA 30043

J. N. White, Manager
Gibson County EMC
P. O. Box 47
Trenton, TN 38382

John M. McBride, Manager
Guernsey-Muskingum Electric Co-op, Inc.
17 South Liberty Street
New Concord, OH 43762

Tom Upshaw, Manager
Palmetto Electric Co-op, Inc.
P. O. Box 1218
Hilton Head, SC 29928

W. T. Shows, Manager
Pearl River Valley Electric Power Association
P. O. Box 1217
Columbia, MS 39429

Ronald J. Carey, Manager
Poudre Valley REA, Inc.
P. O. Box 1727
Fort Collins, CO 80521

Cecil Viverette, Jr., Manager
Rappahannock Electric Co-op
P. O. Box 7388
Fredericksburg, VA 22404

Jon Bellgowan, Manager
New Hampshire Electric Co-op, Inc.
RFD 2, Tenney Mountain Highway
Plymouth, NH 03264

Harry K. Bowman
General Manager
Northern Virginia Electric Cooperative
P. O. Box 2710
Manassas, VA 22110

J. C. Christopher, Manager
Northwestern Electric Co-op, Inc.
P. O. Box 188
Woodward, OK 73802

Ernest M. Jordan, Jr.
Executive Vice President
Old Dominion Electric Cooperative
Innsbrook Corporate Center
4201 Dominion Boulevard
Glen Allen, VA 23060

Mark A. Glaess, Manager
Oregon RECA
575 Union Street, N.E.
Salem, OR 97301

Charles C. Jones, Jr.
Executive Vice President
Virginia, Maryland & Delaware
Assn. of Electric Cooperatives
Innsbrook Corporate Center
4201 Dominion Boulevard
Glen Allen, VA 23060

William E. Smith
General Manager
Washington Electric Cooperative, Inc.
P. O. Box 8
East Montpelier, Vermont 05651

George F. Seyle, Jr.
Salt River RECC
P. O. Box 609
Bardstown, KY 40004

Walter H. Smith
General Manager
Southern Maryland Electric
Co-op, Inc.
Hughesville, MD 20637

Benjamin A. Pitts, Manager
Sussex REC
P. O. Box 346
Sussex, NJ 07461

Marv Athey, General Manager
Trico Electric Co-op, Inc.
P. O. Box 35970
Tucson, AZ 85740

Applications for membership have been received from:

Cap Rock Electric Cooperative
Stanton, Texas
David Pruitt, Manager

Farmer's Electric Cooperative
Chillcothe, Missouri
Dan Bryan, Manager

Washington Electric Cooperative
East Montpelier, Vermont
William Smith, Manager

Jackson EMC
Jefferson, Georgia
Randall Pugh, President/CEO

Southern Maryland Electric Cooperative
Hughesville, Maryland
Walter Smith, Executive Vice-President & General Manager
Representing Southern Maryland
Jan Penn

Recertification for 1988 was not received from:

Davidson EMC
Lexington, North Carolina
Wayne Wilkins, Manager

Northern Electric Cooperative
Virginia, Minnesota
David Parker, Manager

Four County EMC
Burgaw, North Carolina
Ed Brown, Manager

Union REA
Brighton, Colorado
Dave Dunnell, Manager

TELEPHONE COMMUNICATION WITH DAVIDSON/WAYNE WILKINS, FOUR COUNTY/ED BROWN AND UNION/DAVE DUNNELL, REVEAL THAT THEY WOULD LIKE TO RETAIN THEIR REMDC MEMBERSHIP WITH THE 1988 RECERTIFICATION TO BE SUBMITTED BY MID-SUMMER (1989) FOR APPROVAL AT THE 1990 MEMBERSHIP MEETING.

ACTION TO BE TAKEN

1. **Mr. Chairman, the Membership Committee recommends the acceptance of five (5) new members:**

Cap Rock Electric Cooperative
Stanton, Texas

Farmer's Electric Cooperative
Chillcothe, Missouri

Washington Electric Cooperative
East Montpelier, Vermont

Jackson EMC
Jefferson, Georgia

Southern Maryland Electric Cooperative
Hughesville, Maryland

2. **The Committee additionally recommends recertification of the following members:**

Cobb EMC
Georgia

Guadalupe Valley
Texas

Shenandoah Valley
Virginia

Linn County
Iowa

Hancock-Wood
Ohio

3. **The Committee further recommends that Davidson/North Carolina, Four County/North Carolina and Union/Colorado be permitted to submit their recertification by mid-summer, 1989 for Council approval at the 1990 meeting.**

Systems to recertify in 1990:

Central Area Data Processing
St. Peters, Missouri
Gary Hobson, Manager

Delaware
Greenwood, Delaware
Paul Bienvenue, Manager

Flint EMC
Reynolds, Georgia
Harold Smith, Manager

Lumbee River EMC
Red Springs, North Carolina
Ronnie Hunt, Manager

Southeast Iowa
Mt. Pleasant, Iowa
Larry Hopkey, Manager

The strength of this organization is found in our quality membership.

As you attend regional/national meetings remember the REMDC when talking with those systems on the "Cutting Edge".

We **must** have your support and leadership as we **"COPE IN THE 90'S".**

HOW CAN RURAL ELECTRICS COPE IN A WORLD ECONOMY?

Wayne Johnson, Chairman
Research Committee
Clark County REMC, Indiana

Over the past three days we have heard about many things: individual successes; about cooperatives who have effective programs of service, member involvement, competitive rates and diversification.

We have remembered and recognized the contribution of those coop leaders from our group who are no longer with us.

We have enjoyed fine food and great fellowship.

Throughout the meeting, however, there has been a disquieting theme struck by numerous voices. That theme has many different chords but all raise the question: Are these Obstacles or Opportunities?"

We heard of:

state legislatures considering legislation to allow for territorial change because of rate disparity - in other words to provide for customer choice. With coops generally higher than their neighboring utilities we stand to lose if such legislation is passed.

coops not paying their bills. We have a tradition of being a people who pay their own way and honor their contracts.

bankruptcies by coops to avoid obligations.

banks who say, "we will never lend to another electric cooperative".

qualified audits by CPA, including the recomendation that G & T capital credits be written off as worthless assets.

challenges to the 100% debt financing approach used by G & T's.

annexation threats.

We hear:

that distribution systems have abdicated their control over the G & T.

challenges at the G & T level of the principle of one system one vote. Several smaller systems are outvoting the larger members to keep rates and policies in place which benefit the small system at the expense of the members of the larger systems.

challenges at the distribution level for equal

representation based on kilowatt hours used or revenue.

challenges to the same principle at the statewide level.

decline in the spirit of cooperation: now, it's "what's in it for me?" not "what is in the best interests of the program?" Was the farmer member in the 30's really that different from the consumer of today?

serious rate disparity is occurring as G & T's pass on the costs for reserve capacity while IOU's are aggressively looking for new markets for energy from older plants.

for the industry, it is too risky to build new plant capacity for future needs.

is the 2.8% growth rate of 1975 - 1985 the norm or is it the last two year's rate of nearly six percent? Which do you build your forecast upon for the next ten years?

what about the environmental challenge - acid rate legislation?

our states and communities are in an economic war for new industry and for expansion of existing industry: can we or should we attempt to serve these multinational companies? are we large enough to take the risk of providing service at extremely competitive rates? Most EDR rates allow little or nothing for the distribution cooperative. Should loads over 500 Kw be served by the G & T or other power supplier?

are we prepared philosophically for the changes necessary if we are to assume "full utility responsibility" for our service areas?

has there been a loss of vision or are we suffering from the cataracts of old age?

has the message changed or is it the medium for the message which has changed?

do we no longer have "members" but "consumers" or customers instead?

where should the equity be located in our program: at the distribution level or G & T? remember the new age golden rule: he who has the gold - rules.

with 70% or more of every dollar going to the G & T, do we already have "defacto" vertical integration? are we just too stubborn to admit it?

are the WVPA's, Desseretts and Colorado-Ute's just an aberration or the logical outgrowth of a system which no longer works in the last decade of the 20th century?

can or will we federate power supply over several states to reduce risk and provide the diversity needed to compete in the new market place?

can or will we provide the absolute commitment to pay our debts - namely, pledge the assets of the distribution system for both its debts and those of the G & T?

if we will, what form or structure will it require?

how far can we go with cost containment of distribution expenses before we face the inevitable - create larger operating systems to reduce unit costs or let someone else do it?

what about diversification: fade or a necessity?

Jim Kiley reminded us of Tom Nelson's words, "in the early years we were a movement with all the fire and vigor that go with a movement. Now we have evolved into an institution". Institutions often spend their time protecting traditions and respect for authority and order.

It is said that "organized religion is the last best defense against God".

Today, we face a world economy that is rapidly changing. Whole industries are moved about world in order to remain competitive or turn a greater profit for a multinational company. Jobs and whole plants are often closed even though they are turning out a good product at a competitive price - simply because the company wants to allocate its resources to activities which will make more money. Little wonder that employees, including rural electric employees, are wondering when the rules changed: "an honest day's work for an honest day's pay".

We hear of rural electric employees questioning their future with the REC's. Will they be here or will my job be here in five or ten years?

We hear of mergers, consolidations and leverage buyouts throughout the industrial world today.

What about the rural electric program?

Today, we have three resources to address this question.

Bob Schiller, NRECA, has worked on ten or more consolidation or merger studies. He can bring to us some realities about what is going on om that area as well as the subject of diversification.

Carl Stover, C.H. Guernsey Engineers, who has also participated in many of those studies, will get very specific with us on the challenge of service to large industrial loads. What do we really have to do to serve? What problems are created? What are the risks? Do you really want to commit all this capacity? Will getting larger through consolidation or merger help us? And, do we really want to serve large loads which may go away in a few years?

Finally, Jim Hubbard, CFC, will be asked to respond to three of the questions raised by these presentations.

Opportunities or Opportunities?

Bob Schiller will lead off.

Bob Schiller, NRECA
Director, Management Internship Program
Lincoln, Nebraska

- Leadership is tough to find. MIP is very important to me. The whole story is "cooperation."

- Should look at consolidations and mergers from the perspective of the membership who will be voting on these consolidations/mergers.

- Two distribution cooperatives voted down. Cooperative managers doing all they know to do (MAC, media, education, 30 district meetings in 45 days). Voice of members spoke. People who believe in consolidation believe in it.

- Trust and honesty. Cooperatives must be honest with membership. If we are to make a cultural change, members must trust and believe what we have to say.

- Doyle Hines cooperative to begin consolidation following week. Every member deserves to know what consolidation is all about. Think futuristic - not just today.

- Why consider consolidation? Merger? What is the difference?

- Some cooperatives destroy themselves with greed. There must be cooperation among all of us.

- How does shared management work? By two or more distribution systems? Statewide? Power supplier? In theory it sounds good, one data processing department, one manager, one auditor, one lawyer, etc.

- Traditional reasons for consolidation:
  - Maintain or reduce rate increase.
  - Reduction of cost or increase efficiencies.
  - Improve electric service.
  - Management wants to manage bigger system.
  - Local economy problems (driving force in most recent cases).

  (Fear plays a big part in consolidation.)

- Traditional reasons against consolidation:
  - Loss of director representation.
  - Loss of local job.
  - Loss of money in local economy.
  - Employees fear of job loss or downgrading.
  - Everything is fine in our economy.
  - Distrust of members concerning: Consolidation study findings.
    Real reason for consolidation.
    Consultants and anyone supporting effort.
  - Location of headquarters.
  - Debt/ownership comparisons.
  - Capital credit rotation plan.
  - Employee benefits programs and compensation.

RESEARCH COMMITTEE REPORT (Continued)

- o Must have Board of Directors commitment from Day #1.
- o Where are the traditional dollar savings? (80% from employees.)
- o Should savings be based on present or future value? (MIP teaching present values and how to deal with it. Do not know the future value.)
- o Can your system reduce cost by reorganization efforts?
- o See attached Financial and Statistical Report - REA Form 7 which shows consolidation of G&T system. (This computer program is available to everyone.)
- o Do we do vertical integration or horizontal? What do you do and how do you understand? Strengths go up when banks look at it? Why are we proud of it? Each member system must make this decision. How do we help the membership in order to make consolidations/mergers successful?
- o Majority of members do not care! If we give them the true picture, they vote and make the decision - it's what they want. It is their decision to make. (If they want to sell, why fight against it?)
- o We must give up something to get something. Change is inevitable.
- o Who are we trying to protect? Employees? Management? Board of Directors?
- o In some cases, there is financial gain for both systems. All must cooperate.
- o If things continue as today, we are wasting our time. There can be tremendous gain for all. We must look at the EMC family and the cooperative way of life. We can only retain this through regional distribution systems. We must look at broader scale. Look at real costs. What are real advantages or remaining as a cooperative?
- o Diversification - members look to cooperative for far more than electric service. May need to offer more federated types of service. There must be organization - especially when private industry looks at us. We no longer wear "bib overalls." Do not have to be contiguous - with the methods of communications we have today.
- o Cannot have vertical integration with G&T. Loan systems and financing must always be in relationship with power supplier and distribution system. Must be a "check and balance."
- o Equity must be created at distribution level. G&T must create cash flow situation.
- o Must have competent managers on G&T Boards.
- o Revolving fund - believed this was on-going source for borrowing funds. Being used to offset defaults. Is it not functioning as it should? Funds have taken "hits." Fund is starting to get in trouble. Fund was not designed for defaults. Is this fund still viable?

RESEARCH COMMITTEE REPORT (Continued)

- Under our federated system it is hard to perform as a G&T director. Must remove this hat and perform as cooperative director. Hard for employee to play this role. Vision sometimes becomes clouded. Perhaps have not prepared these people for this role.

- There are problems we have not focused on yet. Have spent time working with Seminole Board on understanding relationship between distribution cooperative and G&T.

- Must be a re-focus...cultural changes...cooperative philosophy.

- Must "plant seeds" - provide information. Look at systems from long range. Let members tell management instead of reverse. Need help on what kinds of "seed" to plant. "Marketing" can come back and bite us!

- Members have the voice in consolidation. Our job is to provide the facts. Must have information on what results will be if consolidated. Must show what strengths are and help to change direction.

- Diversification:
  - -Start from scratch.
  - -Acquire on-going business.
  - -Taxable or non-taxable.
  - -Related or non-related business.
  - -Profit or service company.
  - -Funding for start-up.
  - -Management agreement.

FINANCIAL AND STATISTICAL REPORT - REA FORM 7 PART A & C
FINANCIAL AND STATISTICAL KEY RATIOS
STATEMENT OF CASH FLOWS - INDIRECT AND DIRECT METHOD

PART A FINANCIAL AND STATISTICAL REPORT FORM 7

ITEM	SD&M 1	SD&M2	SD&M3	SD&M4	GRAND TOTAL
1 OPERATING REVENUE	$33,087,432	$22,070,267	$16,907,446	$11,753,811	$83,818,956
2 POWER PRODUCTION EXP.			$0	$0	$0
3 COST OF POWER	$20,539,576	$14,477,303	$10,477,701	$7,716,853	$53,211,433
4 TRANSMISSION EXPENSE			$0	$0	$0
5 DISTR. EXPENSE OPERATION	$927,652	$694,221	$702,865	$346,340	$2,671,078
6 DISTR. EXPENSE MAINT.	$1,166,078	$1,082,247	$588,961	$519,714	$3,357,000
7 CONSUMER ACCOUNT EXPENSE	$747,970	$400,057	$341,413	$265,916	$1,755,356
8 CUSTOMER SERVICE EXPENSE	$530,043	$366,604	$207,367	$150,888	$1,254,902
9 SALES EXPENSE	$138,244	$89,816	$15,084	$26,222	$269,366
10 ADMIS. AND GENERAL EXP.	$2,784,739	$1,844,916	$1,848,196	$924,102	$7,401,953
11 TOTAL OPER.& MAINT.EXP.	$26,834,302	$18,955,164	$14,181,587	$9,950,035	$69,921,088
12 DEPR. & AMORT. EXPENSE	$1,725,855	$1,396,464	$1,252,999	$636,968	$5,012,286
13 TAX EXPENSE PROPERTY	$578,479	$192,127	$92,718	$145,249	$1,008,573
14 TAX EXPENSE OTHER	$357,813	$454,485	$411,383	$102,858	$1,326,539
15 INTEREST LONG TERM DEBT	$2,041,245	$852,639	$540,451	$513,544	$3,947,879
16 INTEREST CHARGED TO CONST	$0	$0	$0	$0	$0
17 INTEREST EXPENSE OTHER	$32,988	$12,187	$1,221	$1,277	$47,673
18 OTHER DEDUCTIONS	$20,509	$6,747	$10,119	$0	$37,375
19 TOTAL COST OF ELEC. SERV.	$31,591,191	$21,869,813	$16,490,478	$11,349,931	$81,301,413
20 PATRONAGE CAPITAL & MARG.	$1,496,241	$200,454	$416,968	$403,880	$2,517,543
21 NON OPERATING MARGINS-INT	$335,121	$275,690	$403,751	$172,403	$1,186,965
22 A.F.U.D.C.	$0	$0	$0	$0	$0
23 NON OPERATING MARGINS-OTH	($27,475)	$17,765	($20,281)	$49,111	$19,120
24 GEN. & TRANS. CAPITAL CR.	$797,370	$572,512	$405,759	$294,288	$2,069,929
25 OTHER CAPITAL CREDITS	$89,021	$6,722	$3,895	$15,377	$115,015
26 EXTRAORDINARY ITEMS	$0	($44,196)	$0	$0	($44,196)
27 PATRONAGE CAPITAL,MARGINS	$2,690,278	$1,028,947	$1,210,092	$935,059	$5,864,376
TOTAL MILES OF LINE PART B LINE 8	11,223	10,298	$9,696	$4,956	36,173
TOTAL CONSUMERS PART R LINE 10	28,426	16,646	$11,182	$9,025	65,279
TOTAL KWH SOLD PART R LINE 11	506,569,368	330,752,108	$206,504,322	$179,398,719	1,223,224,517
TOTAL # OF EMPLOYEES PART I LINE 1	81	121	65	41	308

PART C BALANCE SHEET REA FORM 7

ASSETS AND OTHER DEBITS	SD&M 1	SD&M2	SD&M3	SD&M4	GR TOTAL
1 TOTAL PLANT IN SERVICE	$67,484,763	$53,830,471	$44,820,386	$25,822,559	$191,958,179
2 CONST. WORK IN PROGRESS	$1,005,897	$499,494	$1,375,874	$240,065	$3,121,330
3 TOTAL UTILITY PLANT	$68,490,660	$54,329,965	$46,196,260	$26,062,624	$195,079,509
4 ACCUM DEPREC.&AMORT	$21,839,165	$11,173,589	$17,512,882	$8,493,991	$59,019,627
5 NET UTILITY PLANT	$46,651,495	$34,612,130	$28,683,378	$17,568,633	$127,515,636
6 NONUTILITY PROPERTY - NET	$22,488	$4,020	$100	$943	$27,551
7 INVEST/ASSOC ORG-PAT CAP	$9,240,585	$6,275,698	$4,270,384	$3,483,529	$23,270,196
8 INVEST/ASSO ORG OTHER-G.F.	$44,331	$33,990	$415,778	$43,819	$537,918
9 INVEST/ASSOC ORG NON G.F.	$3,056,294	$1,936,955	$1,167,760	$1,214,770	$7,375,779
10 OTHER INVESTMENTS	$915,274	$572,570	$155,610	$305,961	$1,949,415
11 SPECIAL FUNDS			$256,105	$0	$256,105
12 TOT-OTHER PROP & INVEST	$13,278,972	$8,823,233	$6,265,737	$5,049,022	$33,416,964
13 CASH-GENERAL FUNDS	$378,635	$359,381	$628,529	$487,536	$1,854,081
14 CASH-CONST FUNDS-TRUSTEE	$100	$105	$10	$94,401	$94,616
15 SPECIAL DEPOSITS	$0	$0	$0	$1,100	$1,100
16 TEMPORY INVESTMENTS	$2,930,548	$2,483,209	$4,383,622	$1,232,156	$11,029,535
17 NOTES RECEIVABLE-NET	$2,483	$34,939	$6,995	$3,745	$48,162
18 A/R-NET SALE OF ENERGY	$1,810,341	$855,025	$179,815	$743,314	$3,588,495
19 A/R-NET OTHER	$129,765	$116,086	$92,181	$189,587	$527,619
20 M & S/ELECTRIC & OTHER	$2,215,202	$1,665,469	$1,616,151	$509,820	$6,006,642
21 PREPAYMENTS	$380,121	$115,679	$169,507	$79,259	$744,566
22 OTHER-CUR & ACCRUED ASSETS	$132,050	$35,908	$43,692	$16,734	$228,384
23 TOTAL CURR & ACCRUED ASSET	$7,979,245	$5,665,801	$7,120,502	$3,357,652	$24,123,200
24 DEFERRED DEBITS	$422,311	$218,954	$160,955	$138,502	$940,722
25 TOT ASSETS & OTHER DEBITS	$68,332,023	$49,320,118	$42,230,572	$26,113,809	$185,996,522

	KEY RATIOS	SD& M 1	SD&M 2	SD&M 3	SD&M 4	GR TOTAL
1	TIER	2.32	2.21	3.24	2.82	2.49
3	M/TIER	1.88	1.53	2.48	2.22	1.93
7	PRR	5.46	7.16	7.18	6.46	6.37
9	EQUITY RATIO	31.34	23.01	37.68	36.75	31.33
10	REV/MILE	2948.18	2143.16	1743.75	2371.63	2317.17
11	GEN FUNDS/TTL PLANT	6.27	6.36	12.64	7.94	8.02
12	CURRENT RATIO	2.07	3.24	4.61	3.56	2.98
14	RATE OF RET ON RT BASE	7.14	2.87	3.11	4.94	4.77
18	CONSUMER/MILE	2.53	1.62	1.15	1.82	1.80
19	CONSUMER/EMPLOYEE	350.94	137.57	172.03	220.12	211.94
20	LONG TERM DEBT/CONSUMER	1508.22	1190.36	2174.76	1251.19	1505.81
22	TOTAL MARGIN/CONSUMER	94.64	61.81	108.22	103.61	89.84
25	CONS ACCT EXP/CONS	26.31	24.03	30.53	29.46	26.89
26	A&G EXP/CONS	97.96	110.83	165.28	102.39	113.39
27	CUS SERV EXP/CONS	18.65	22.02	18.54	16.72	19.22
28	O&M+A&G+CONS ACCT EX/CONS	197.93	241.59	311.34	227.82	232.62
29	POW+TX+DEP+INT/CONS	888.02	1043.68	1142.48	1010.02	988.17
39	REV-POWER COST/MWH	24.77	22.96	31.14	22.50	25.02
40	POWER COST/MWH	40.55	43.77	50.74	43.02	43.50
42	TTL PLANT/$1000	68490.66	54329.97	46196.26	26062.62	195079.51
44	PLANT/MILES LINE	6102.71	5275.78	4764.47	5258.80	5392.96
45	O&M EXP/$1000 PLANT	30.57	32.70	27.96	33.23	30.90
46	TAXES/$1000 PLANT	13.67	11.90	10.91	9.52	11.97
47	DEPR/TTL PLANT IN SERV %	32.36	20.76	39.07	32.89	30.75
52	DEBT/TTL ASSET %	62.74	40.18	57.58	43.24	52.85
55	INT EXP/ REV %	6.17	3.86	3.20	4.37	4.71
56	POWER COST/REV %	62.08	65.60	61.97	65.65	63.48
67	INT+LESS INT- /$1000 PLT	4.41	4.85	8.71	6.57	5.84

RURAL ELECTRIC MANAGEMENT DEVELOPMENT COUNCIL

FARGO, NORTH DAKOTA

SERVICE TO LARGE INDUSTRIAL CUSTOMERS

May 17, 1989

CARL STOVER

C. H. GUERNSEY & COMPANY

Consulting Engineers and Architects

Oklahoma City, Oklahoma

STRATEGY FOR SERVING
THE LARGE POWER CUSTOMER

- WHO SHOULD SERVE THE LP CUSTOMER?

- WHAT IS THE APPROPRIATE RATE FOR THE LP CUSTOMER?
  - HOW SHOULD THE LP RATE BE DEVELOPED?
  - WHAT ARE THE APPROPRIATE COST COMPONENTS?
  - DOES THE RATE HAVE TO BE COST BASED?

- HOW CAN A COOPERATIVE BE COMPETITIVE FOR LP CUSTOMERS?

- DO OTHER CUSTOMERS BENEFIT FROM SERVICE TO LP?

- WHAT ARE SHORT-TERM AND LONG-TERM IMPLICATIONS OF SERVING THE LP CUSTOMER?

TERMS AND RELATIONSHIPS

1. NONCOINCIDENT PEAK DEMAND

CUSTOMER'S MAXIMUM PEAK DEMAND USUALLY MEASURED OVER A 15- TO 30-MINUTE PERIOD.

2. COINCIDENT PEAK DEMAND

CUSTOMER'S DEMAND AT THE TIME OF THE SYSTEM PEAK.

SYSTEM PEAK MAY BE WHOLESALE SUPPLIER OR DISTRIBUTION SYSTEM PEAK.

3. COINCIDENCE FACTOR

$$C.F. = \frac{\text{DEMAND AT TIME OF SYSTEM PEAK (CP)}}{\text{MAXIMUM NONCOINCIDENT PEAK DEMAND (NCP)}}$$

4. LOAD FACTOR

$$L.F. = \frac{\text{ENERGY IN USAGE PERIOD}}{\text{PEAK DEMAND IN PERIOD X HOURS IN PERIOD}}$$

PERIOD MAY BE ANY ACCOUNTING PERIOD -- DAY, MONTH OR YEAR.

PEAK DEMAND MAY BE DEFINED AS NONCOINCIDENT PEAK OR COINCIDENT PEAK.

5. TILT

$$TILT = \frac{\text{DEMAND COST RECOVERED IN ENERGY COMPONENT OF RATE}}{\text{TOTAL DEMAND COST}}$$

TERMS AND RELATIONSHIPS

(Continued)

6. MARGIN DEFINED BY TIER

MARGIN = (DESIRED TIER - 1) (INTEREST EXPENSE)

7. MARGIN DEFINED BY RATE OF RETURN

MARGIN = (ROR) (RATEBASE) - INTEREST EXPENSE

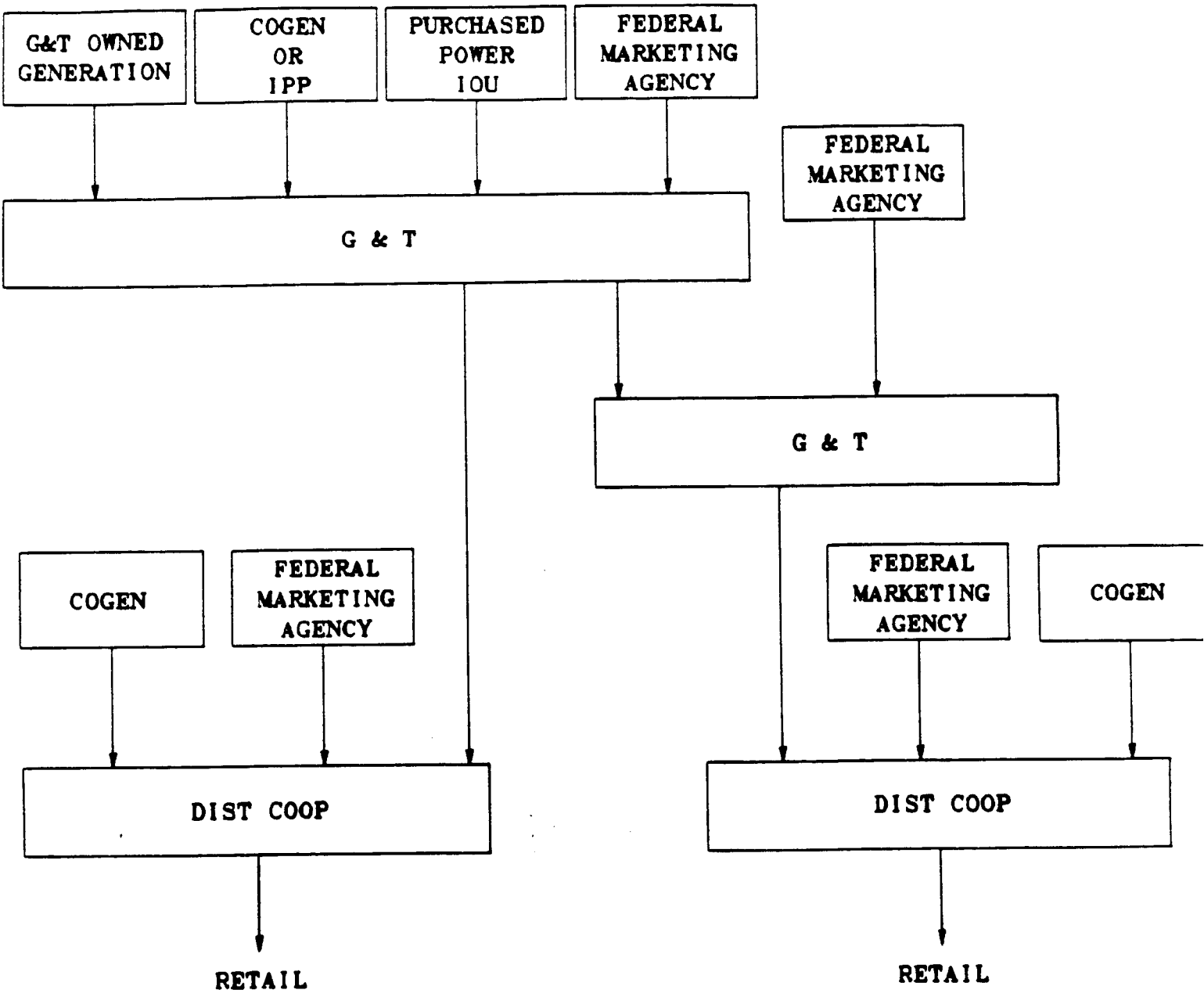
8. MARGIN DEFINED BY UNIFORM PERCENT OF REVENUE

$$\text{MARGIN} = \frac{\text{PERCENT MARGIN}}{\text{1 - PERCENT MARGIN}} \times \text{TOTAL COST TO SERVE}$$

9. GENERATION RESOURCE RESERVES

$$\%\ \text{RESERVES} = \frac{\text{TOTAL CAPACITY RESOURCES - FIRM LOAD}}{\text{FIRM LOAD}} \times 100$$

ORGANIZATIONAL RELATIONSHIPS



COST ASSOCIATED WITH PROVIDING SERVICE TO LP

PRODUCTION

- FUEL
- O&M FIXED
- O&M VARIABLE
- PURCHASED POWER
- DEPRECIATION, TAXES & INTEREST
- MARGIN

TRANSMISSION

- O&M
- DEPRECIATION, TAXES & INTEREST
- MARGIN

DISTRIBUTION

- O&M
- CONSUMER ACCOUNTING/SALES
- ADMINISTRATIVE AND GENERAL
- DEPRECIATION, TAXES & INTEREST
- MARGIN

ISSUES

- HOW SHOULD COSTS BE ASSIGNED TO LP?
- WHAT IS IMPACT ON OTHER CUSTOMERS?
- WILL ASSIGNMENT ALLOW REC TO BE COMPETITIVE?

CAPITAL RECOVERY FOR LARGE POWER SERVICE

ISSUES:

- AMOUNT OF DIRECT COST
- USE OF FACILITIES BY OTHERS
- CONTRIBUTION OF CUSTOMERS
- AMORTIZATION PERIOD
- COST OF CAPITAL
- SALVAGE VALUE

METHOD OF RECOVERY:

- ACCRUAL = DEPRECIATION + INTEREST
- CASH = PRINCIPAL + INTEREST

STEPS INVOLVED IN
DEVELOPMENT OF COST OF SERVICE STUDY

1. FUNCTIONALIZE COSTS

2. CLASSIFY COSTS

3. DEVELOP ALLOCATION FACTORS

4. ALLOCATE INVESTMENT AND COST RESPONSIBILITY

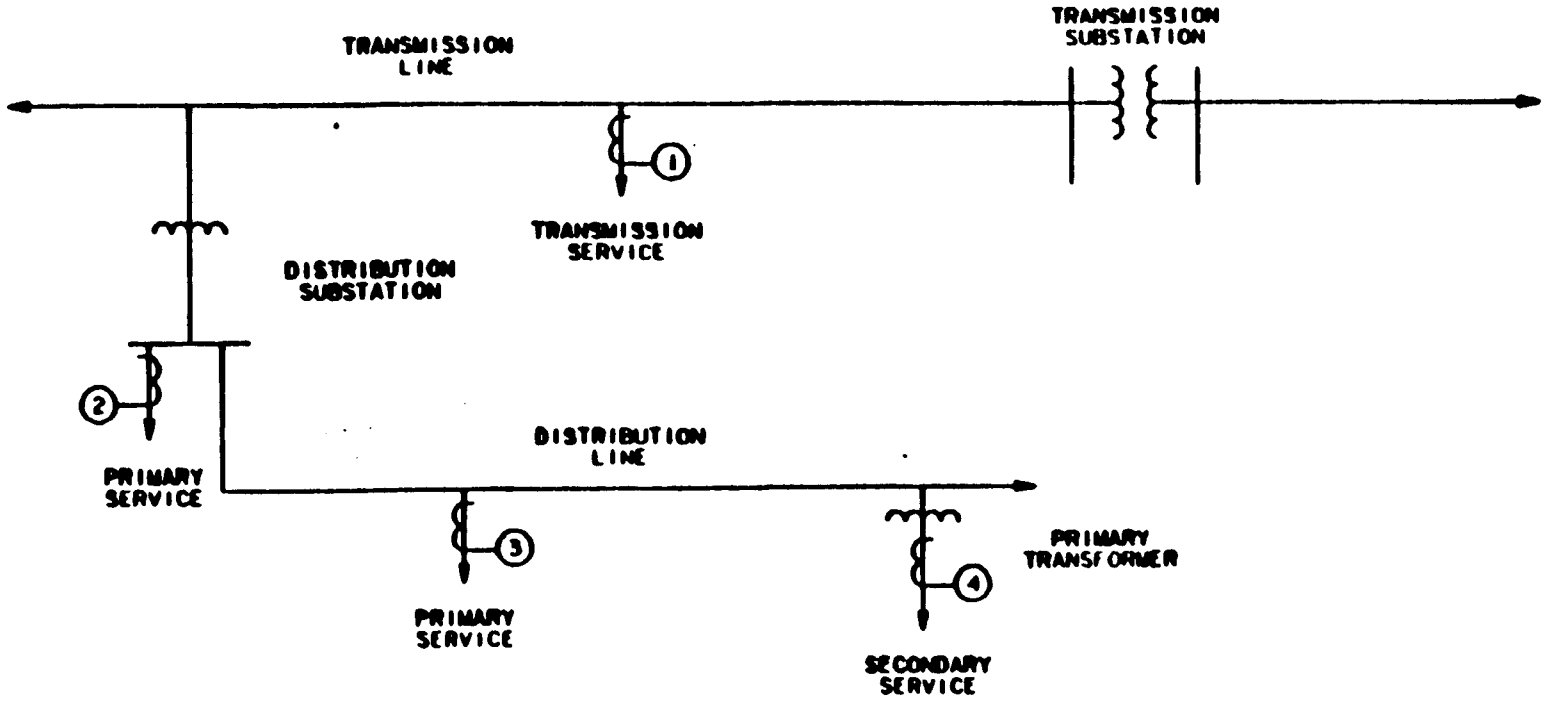
COST CLASSIFICATIONS

- ACCOUNTING COST
  - AVERAGE COST
  - EMBEDDED COST

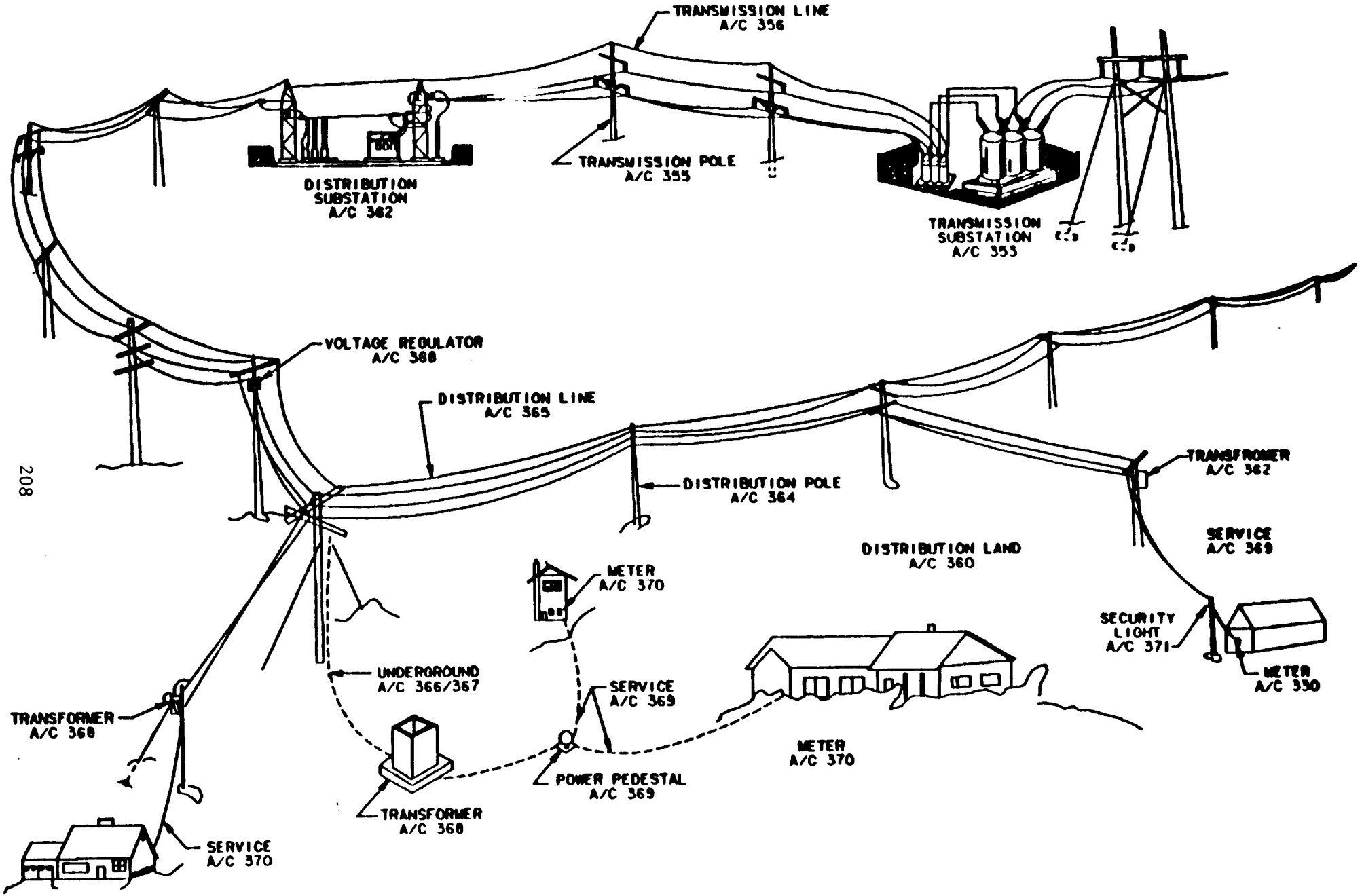
- TIME DIFFERENTIATED COST

- MARGINAL COST
  - LONG RUN
  - SHORT RUN

SERVICE CONFIGURATION TO RETAIL CUSTOMERS



	TRANS. FACILITIES 350-356	DIST SUBS 362	OH PRIMARY LINE 364/365	UG PRIMARY LINE 366/367	TRANSFORMER 368	REGULATOR 369	SERVICE 369	METER 370
(1)	X							X
(2)	X	X						X
(3)	X	X	X	X		X		X
(4)	X	X	X	X	X	X	X	X


TRANSMISSION LINE
A/C 356
TRANSMISSION POLE
A/C 355
DISTRIBUTION
SUBSTATION
A/C 362
TRANSMISSION
SUBSTATION
A/C 353
VOLTAGE REGULATOR
A/C 368
DISTRIBUTION LINE
A/C 365
DISTRIBUTION POLE
A/C 364
TRANSFORMER
A/C 362
SERVICE
A/C 369
DISTRIBUTION LAND
A/C 360
METER
A/C 370
SECURITY
LIGHT
A/C 371
METER
A/C 330
UNDERGROUND
A/C 366/367
SERVICE
A/C 369
TRANSFORMER
A/C 368
METER
A/C 370
POWER PEDESTAL
A/C 369
TRANSFORMER
A/C 368
SERVICE
A/C 370

CLASSIFICATION OF COSTS

- FIXED (DEMAND)
- VARIABLE (ENERGY)
- CUSTOMER

CONCEPTS: SYSTEM IS DESIGNED TO SERVE CUSTOMER LOAD.

LOAD IS DEFINED IN TERMS OF:

- PEAK DEMAND
- ENERGY REQUIREMENT
- NUMBER OF CUSTOMERS SERVED

CLASSIFICATION OF PLANT
FOR DISTRIBUTION COOPERATIVES

	DEMAND	ENERGY	CUSTOMER
PRODUCTION PLANT	X	X	
TRANSMISSION PLANT	X		
DISTRIBUTION PLANT:			
360 LAND	X		
361 STRUCTURES	X		
362 STATION EQPT	X		
364/5 OH LINES	X		X
366/7 UG LINES	X		X
368 TRANSFORMERS	X		X
369 SERVICES			X
370 METERS			X
371 CONS. PREMISES			X
372 LEASED PROPERTY			X
373 STREET LIGHTS			X
GENERAL PLANT	X		X

CLASSIFICATION OF COSTS
FOR DISTRIBUTION COOPERATIVES

	DEMAND	ENERGY	CUSTOMER
PURCHASED POWER	X	X	
TRANSMISSION O&M	X		
DISTRIBUTION O&M	X		X
CONSUMER ACCTG/SALES			X
ADMINISTRATIVE & GENERAL	X		X
DEPRECIATION	X		X
TAXES	X		X
INTEREST	X		X
MARGIN	X	X	X

CLASSIFICATION OF COST COMPONENTS AND THEIR IMPACT ON RATE DESIGN

1. DEMAND AND ENERGY RELATIONSHIPS FOR THE G&T

2. DEMAND AND CUSTOMER RELATIONSHIPS FOR THE DISTRIBUTION COOPERATIVE

3. ALLOCATION OF COST RESPONSIBILITY FOR THE DISTRIBUTION COOPERATIVE

COORDINATION OF MARGIN ALLOCATION

RATE DESIGN PROCESS:

- MARGIN IS COMPONENT OF REVENUE REQUIREMENT
- RESPONSIBILITY FOR MARGIN MUST BE ASSIGNED TO EACH CUSTOMER CLASS

CAPITAL CREDIT ALLOCATION PROCESS:

- MARGIN IS ASSIGNED TO EACH CUSTOMER
- IDEALLY, THE MARGIN ASSIGNED SHOULD EQUAL THE MARGIN CONTRIBUTED

RATE DESIGN MARGIN ALLOCATION METHODS

UNIFORM RETURN ON INVESTMENT:

- RELATED TO INVESTMENT ASSOCIATED WITH PROVIDING SERVICE
- INTERCLASS RELATIONSHIP MEASURED BY RELATIVE RATE OF RETURN (RROR)

$$\text{RROR} = \frac{\text{CLASS ROR}}{\text{SYSTEM ROR}}$$

UNIFORM MARGIN AS PERCENT OF REVENUE:

- NOT RELATED TO INVESTMENT
- REQUIRES EACH CUSTOMER TO CONTRIBUTE SAME PERCENTAGE OF REVENUE TO MARGIN REQUIREMENT

$$\frac{\text{CLASS MARGIN}}{\text{CLASS REVENUE}} = \frac{\text{SYSTEM MARGIN}}{\text{SYSTEM REVENUE}}$$

$$\text{CLASS MARGIN} = \left[\frac{\%}{1 - \%}\right]\left[\text{COST}\right]$$

CAPITAL CREDIT ALLOCATION METHODS

CAN BE BASED ON:

- **REVENUE**
- **REVENUE LESS PURCHASED POWER**
- **ENERGY**
- **COST OF SERVICE**

LARGE POWER RATE

FACILITIES CHARGE:

- RECOVER DIRECT COST OF PROVIDING SERVICE
- RECOVER SYSTEM ALLOCATED CUSTOMER-RELATED COST
- AMORTIZATION PERIOD EQUAL TO CONTRACT PERIOD
- ESTABLISH MINIMUM BILLING

DEMAND CHARGE:

- RECOVER DEMAND COMPONENT OF PURCHASED POWER COST PLUS LOSSES
- RECOVER SYSTEM ALLOCATED DEMAND-RELATED COST

ENERGY CHARGE:

- RECOVER ENERGY COMPONENT OF PURCHASED POWER COST PLUS LOSSES
- FUEL MAY BE INCLUDED IN ENERGY CHARGE OR SEPARATE

MARGIN CHARGE:

- MAY BE BASED ON ROR OR PERCENT MARGIN
- MAY BE SEPARATE OR INCLUDED AS PART OF OTHER CHARGES

ADJUSTMENT PROVISIONS

- **PURCHASED POWER COST**
  - **UNIFORM $/kWh**
  - **DEMAND / ENERGY**

- **TIER INDEXING**

LOAD MANAGEMENT RATE

DEFINE COMPONENTS OF COST OF SERVICE

- DEMAND - CP VS. NCP
- ENERGY
- CUSTOMER

ESTABLISH TIME VARYING RELATIONSHIPS

- DEMAND - ON-PEAK VS. OFF-PEAK
- ENERGY - FUEL COST FOR RESOURCES AVAILABLE
- COST RELATIONSHIPS VARY
  - LONG TERM
  - SEASONAL
  - MONTHLY
  - DAILY

DETERMINE POTENTIAL BENEFITS OF ALTERING LOAD PROFILE

DETERMINE ABILITY TO VARY LOAD PROFILE

DEFINE COST/BENEFIT RELATIONSHIPS FOR:

- G&T (SUPPLIER)
- DISTRIBUTION COOPERATIVE
- CUSTOMER

UTILITY MARKETING OBJECTIVES

1. DISCOURAGE DEMAND GROWTH

   DISCOURAGE ENERGY GROWTH

2. DISCOURAGE DEMAND (LOAD MANAGEMENT)

   ENCOURAGE ENERGY

3. ENCOURAGE DEMAND

   ENCOURAGE ENERGY

RATE INCENTIVES

UTILITY AGREES TO:

- GUARANTEED RATE FREEEZE
- REDUCED RATE
- RATE RELATED TO PRICE OF COMMODITY
- RATE TIED TO OTHER UTILITIES

CUSTOMER AGREES TO:

- MAINTAIN MINIMUM LOAD
- INCREASE USAGE
- CHANGE LOAD PATTERN
- INTERRUPT SERVICE
- ADD INVESTMENT UNIT
- ADD NEW LOAD

INCENTIVE RATE

OPTIONS:

- CHANGE IN USAGE
- COMPARABLE RATE OF ALTERNATIVE SUPPLIER
- COMMODITY PRICING INDEX
- INVESTMENT

POTENTIAL PROBLEMS:

- DISCRIMINATION ISSUES
- NOT COST-BASED
- BASIS FOR INVESTMENT DECISION (CUSTOMER AND COOPERATIVE)

ALTERNATIVES:

- COST-BASED
- RECOGNIZE COST DIFFERENTIALS ASSOCIATED WITH TIME OF USE

INCENTIVE/ECONOMIC DEVELOPMENT RATES

OBJECTIVES:

- INCREASE SHORT-TERM PROFITS
- UTILIZE EXCESS RESERVES

BY

- ATTRACTING NEW LOAD
- INCREASING SALES TO EXISTING CUSTOMERS

APPLICABLE TO:

- INDUSTRIALS - MORE RESPONSIVE TO SHORT-TERM CHANGE IN COST

CONCERNS:

- RELATIONSHIP - COST / PRICE
- AFFECT ON OTHER CUSTOMERS

INCENTIVE RATE:

- DISCOUNT OFFERED IF EXISTING CUSTOMER INCREASES LOAD
- RECOGNIZE PRICE ELASTICITY OF INDUSTRIAL CUSTOMER

ECONOMIC DEVELOPMENT RATE:

- INTENDED TO ATTRACT NEW CUSTOMER
- BASED ON - JOB CREATION
  - CAPITAL INVESTMENT

CONCERNS:

- EFFECT (SHORT-TERM/LONG-TERM) ON ALL CUSTOMERS
- HOW MUCH WOULD CUSTOMER HAVE USED WITHOUT DISCOUNT

ECONOMIC DEVELOPMENT RATE:

- LONG-TERM BENEFITS
- SHORT-TERM LOSS V. PRESENT WORTH OF LONG-TERM BENEF T
- DEFINITION OF BENEFITS

TEST:

- PRICE GREATER THAN MARGINAL COST
- RATES CAUSED INCREASED SALES

EXAMPLES OF INCENTIVE RATES

1. Bonneville Power Association Links Aluminum Prices and Rates.

   BPA adjusts rates to track price of aluminum. For each one cent per pound drop below 60 cents, power prices would be cut 0.1 cent per kWh. For each one cent per pound increase above 90 cents, power prices would go up 0.075 cents per kWh.

2. Iowa-Illinois Gas & Electric Pilot Rate Incentive Program.

   Customers with usage of 100,000 kWh will be eligible for price incentives that take the form of guaranteed rate freezes for a specified period, prorata reduction in current rate, or modification of current rates to encourage improved load factor. The Program is intended to recognize competing industries with the same incentives on the same rate; incentives will be proportional if directly competing customers are on different rates.

3. KCP&L Offers Special Rate to Armco.

   Rate reduction intended to lessen impact of Wolf Creek Nuclear Plant for Armco Steel Plant.

4. Illinois Commerce Commission Approves Economic Development Rate for Central Illinois Light.

   To qualify for rate breaks, customer must add five (5) or more "investment units" at facility. An investment unit is a 1% increase in new, non-seasonal load, full-time employment, or a $50,000 increase inn capital as compared to a base period. This rate provides for a reduction in demand of

1st Year	80%
2nd Year	64%
3rd Year	48%
4th Year	32%
5th Year	16%

   There are also provisions for on-peak and off-peak energy charges.

EXAMPLES OF INCENTIVE RATES

5. Canadian Valley Electric Cooperative Offers On-Peak/Off-Peak Rate.

   CVEC offers on-peak/off-peak rate that allows customer to avoid $7.00 demand charge if usage is off-peak.

6. Illinois Power Offers Rates Indexed to Other Utilities.

   Under an IP proposal, rates would be based on a "competitive price index" which would allow 960 existing large commercial/industrial customers to choose between staying with the company's traditional rate structure or opting to have the rates track a composite of rates of 24 other Midwest utilities. The customer would have to stay with the index rate for a five-year contract period.

7. Illinois Commerce Commission Allows Discount Rate for Commonwealth Edison.

   Commonwealth Edison offers a special discount price to Northwestern Steel and Wire Company for the next three years. The special rate was sought because of the steel firm's "dire financial straits." The provision allows for a 50% discount on additional demand above an average historical value for the years 1982-84.

8. Spot Market Pricing.

   Under the program, PG&E customers are sent via computer an hour-by-hour breakdown of the next day's prices. Plant managers use the information to shift production to minimize electricity costs. The spot pricing shows a bigger differential between offand on-peak periods than previous time-of-use rates. Recent spot price quotations range from 4.8 cents per kWh during off-peak to 14.5 cents per kWh during on-peak. Detroit Edison has offered spot market pricing since 1984 to industrial customers. Georgia Power is testing a residential spot pricing, which also involves working on a two-way communication system for bringing energy management, banking, shopping, pay TV, video text news to the customer.

9. Commonwealth Edison Offers Incentive Rate.

   A rate plan is applicable to facilities with a peak demand of 5 MW or more and provides for discounts on power demands that exceed a "base maximum kilowatt demand." Discounts under one rider are 100% in the first year and drop by 20% increments until there is no discount at the end of the five-year program. A second option is a three-year program calling for a 50% discount on additional demand and a one-cent reduction in the kilowatt-hour charge. Discounts do not apply where the demand is less than 110% of the established base level.

EXAMPLES OF INCENTIVE RATES

10. Montana Power Offers Interruptible Rate.

    The rate is offered to a single large chemical plant with an 80-MW load. 74 MW of the 80 MW is on an interruptible basis for 800 hours a year. The 74 MW can be interrupted on five minutes' notice for less than 24 continuous hours, and five hours' notice for 24-60 continuous hours.

11. AP&L Offers Rate Incentive.

    Under the AP&L program, a discount on the demand charge applies to added load during the eight-winter-month period. A 50% discount is offered during the 1985-86 period with the discount dropping 10 percentage points each year during the five-year program period. To be eligible, the added load must be 10% greater than an average of the last 12 months and it must be a minimum increase of 500 kW.

12. Pennsylvania Power & Light Offers Demand Charge Free Days.

    PP&L has proposed eliminating the demand charge for some of its largest customers for up to two days a week. The "demand free" days would serve as an incentive for customers to shift load and to use excess generation capacity.

13. KG&E Offers Discount to Avoid Cogeneration.

    KG&E is offering a five-year interruptible power supply agreement to Vulcan Chemical which is the Company's largest customer, representing 100 MW. The agreement is intended to discourage Vulcan from installing cogeneration.

14. Oklahoma Companies Offer a Trade Gas for Energy Program.

    Under this program, Western Farmers Electric Cooperative, OG&E, and PSO allow a customer to utilize the customer's own gas for generation. If the customer makes arrangements to deliver the gas to the power plant, the Company will deliver the energy to the customer.

EXAMPLES OF INCENTIVE RATES

15. ICC Approves Special Industrial Rate for Illinois Power.

    Illinois Power is proposing to serve a large industrial customer under interruptible rates; under the proposal, the customer would have 1-MW firm reserve capacity and 24 MW of interruptible capacity. For a five-year period, the customer has the right to require that other power be wheeled if there is an interruption.

16. LP&L Develops Customized Rates.

    In the past, LP&L lumped all industrial customers between 20 MW and 100 MW in the same rate schedule. LP&L is now beginning to look at customized rates for individual customers that recognize factors influencing the customer's industry.

17. Arizona Public Service Ties Rate to Price of Copper.

    Under an APS proposal, two large copper mines would receive an 18% to 22% discount based on the current price of $57.66 per pound copper price.

18. Six Iowa Utilities Fund Economic Development Program.

    Six Iowa electric utilities and one gas company are allocating approximately $2.5 million for economic development projects in their service areas offering zero-to-very-low interest rate loans, grants, and investments. Whereas the companies have offered incentive electric rates, this is the first time they are proposing actual financing by the utilities for new business or expansion of existing business.

19. Basin Offers Follow-On Rate.

    Basin Electric is proposing a ten-year program that would allow "follow-on" demand usage to be billed at $4 per kW rather than the base charge of approximately $17 per kW. The follow-on demand is an amount in excess of an average demand for the last three years.

Jim Hubbard, Director
Marketing & Organizational Relations, CFC

- Went to work for CFC in January 1989. Prior to that was executive vice president of North Carolina Association of Electric Cooperatives.

- Have worked on the cooperative side of finance for 30 years.

- CFC staff is trying to be responsive to concerns and problems of cooperatives.

- There is real concern about being supportive and helpful on consolidation. Policy does change in order to meet needs of member systems. Now have a new perspective on consolidation after hearing the presentation by Bob Schiller.

- Diversification is something CFC will continue to be interested in.

- Role in economic development is now to tell member systems what to do. Given the reservoir of leadership, the cooperative is beholden to be out front and provide that leadership. Come up with solutions to problems based on collective best judgement. Valuable commodity, restore self-confidence and faith.

- CFC wants to be part of solution. Each situation in unique. CFC is willing to make it work while they (CFC) look over shoulders on Wall Street.

- Commend everyone for having interest in Council. This council is the "keeper of the flame."

SCHEDULE OF REMDC MEETING DATES AND LOCATIONS

Meeting	Date	Location
1st	May 22-23, 1958	Hotel Pickwick, Kansas City, MO
	(8 people present - Clyde Ellis participated)	
2nd	October 13, 1958	Hotel Pickwick, Kansas City, MO
3rd	March 9-10, 1959	Hotel Pickwick, Kansas City, MO
4th	October 1-2, 1959	Hotel Pickwick, Kansas City, MO
5th	May 19-21, 1960	Hotel Pickwick, Kansas City, MO
6th	May 24-26, 1961	Town House, Kansas City, KS
7th	May 1962	Kansas City, KS
8th	May 15-17, 1963	Town House, Kansas City, KS
9th	May 6-8, 1964	Town House, Kansas City, KS
10th	May 1965	Chicago, IL
11th	May 9-11, 1966	St. Louis, MO
12th	May 9-11, 1967	Fountainbleau Lodge, New Orleans, LA
13th	May 7-9, 1968	Peabody Hotel, Memphis, TN
14th	May 6-8, 1969	Antler Plaza, Colorado Springs, CO
15th	May 12-14, 1970	Bucanneer Lodge, Jekyll Island, GA
16th	May 12-15, 1971	Holiday Inn, Kimberling City, MO
17th	May 9-11, 1972	Radisson, Denver, CO
18th	May 8-10, 1973	Holiday Inn, Fargo, ND
19th	May 7-9, 1974	Landmark Inn, Myrtle Beach, SC
20th	May 20-22, 1975	Ramada Inn, Sioux Falls, SD
21st	May 11-13, 1976	Velda Rose Hotel, Hot Springs, AR
22nd	May10-12, 1977	Sheraton Airport Hotel, Denver, CO
23rd	May 22-26, 1978	Crown City, Kansas City, MO
24th	May 21-25, 1979	Quality Inn, Hilton Head, SC
25th	May 19-22, 1980	Marriott (Bloomington), Minneapolis, MN
26th	May 18-22, 1981	Hilton, Myrtle Beach, SC
27th	May 24-27, 1982	Hyatt Regency, Nashville, TN
28th	May 23-26, 1983	Harley Hotel (Earth City), St. Louis, MO
29th	May 20-24, 1984	Waverly Hotel (Smyrna), Atlanta, GA
30th	May 20-23, 1985	Marriott Inn, Clarksville, IN
31st	May 19-22, 1986	Sheraton Inn, Myrtle Beach, SC
32nd	May 18-21, 1987	Sheraton West Port Inn, St. Louis, MO
33rd	May 16-19, 1988	Holiday Inn, Columbus, MS
34th	May 15-17, 1988	Holiday Inn, Fargo, ND

Note: Two meetings each were held in the years 1958 and 1959.

RURAL ELECTRIC MANAGEMENT DEVELOPMENT COUNCIL

Attendance Record

Cooperative	Year '84	'85	'86	'87	'88	'89	'90	'91	'92	'93
Adams Electric Cooperative	X	X	X	X	X	X				
Blue Ridge EMC	X	X	X	X	X	X				
Blue Ridge Mtn. EMC (GA)	-	-	*	0	X	O				
Brunswick EMC	-	-	*	-	O	-				
Butler County REC					*	X				
Cap Rock Electric **(new member)**						X				
Cass County Electric Co-op	X	X	X	X	X	X				
Central Area Data Processing	-	*	X	X	O	X				
Central Georgia EMC	-	-	*	X	X	X				
Clark County REMC	X	X	X	X	X	X				
Cobb EMC	X	X	X	O	X	X				
Davidson EMC	X	-	-	X	O	O				
Delaware Electric Co-op	X	X	X	X	X	X				
Farmers Electric Co-op **(new member)**						*				
Flint EMC	X	X	X	X	X	X				
Four County EPA (MS)	-	-	X	X	X	X				
Four County EMC (NC)	O	O	O	O	O	O				
Guadalupe Valley EC	X	X	O	X	X	O				
Hancock-Wood EC	*	X	X	X	X	X				
Jackson EMC **(new member)**						X				
Johnson County ECA					*	X				
Lee County EC	-	-	-	O	O	O				
Linn County REC	X	X	X	X	X	X				
Lumbee River EMC	X	X	X	O	X	O				
Maquoketa Valley REC	X	X	O	X	O	X				
Morgan County REMC	X	X	X	X	O	O				
Northeastern REMC	X	-	X	X	O	X				
Northern Electric Co-op.	O	O	O	O	O	-				
Pioneer REC	X	O	O	X	O	X				
Randolph EMC	X	X	X	X	-	-				
Shenandoah Valley EC	X	X	X	X	X	X				
Sioux Valley Empire EA	X	X	X	X	O	X				
Southeast Iowa EA	X	X	X	X	X	X				
Southern Maryland **(new member)**						*				
Southside Electric Co-op	O	-	O	O	O	O				
Union Rural EA	*	X	X	O	O	O				
Washington Electric Cooperative **(new member)**						*				
Wells Rural EC	-	-	-	-	X	X				
Yampa Valley EA	X	X	X	O	O	X				

Code: X - Paid - Attended
O - Paid - Did not attend
* - Attended - Dues not paid

Prospective members who attended by invitation:
Central Wisconsin Electric Co-op, Palmetto Electric Co-op,
Minnesota Valley Electric Co-op, Trico Electric Co-op

RURAL ELECTRIC MANAGEMENT DEVELOPMENT COUNCIL
OFFICERS AND COMMITTEES FOR 1990

Officers

Chairman -	Harold Smith	Term expires 1990
Vice Chairman -	Wayne Johnson	Term expires 1990
Treasurer -	Allen Ritchie	Term expires 1992
Secretary -	Christine Beane	Appointed annually

Program Committee

Chairman -	Paul Bienvenue	Term expires 1992
	Dan Kessler	Term expires 1991
	Kim Colberg	Term expires 1990
	Dan Bryan	Term expires 1992
	Bob Roberts	Term expires 1992

Nominating Committee

Chairman -	Mike Gustafson	Term expires 1990
	Ron Knouse	Term expires 1991
	Derl Hinson	Term expires 1992
	Bob Bauman	Term expires 1992

Membership Committee

Chairman -	Layton Wheeler	Term expires 1990
	Jean Stansell	Term expires 1991
	Marlynn Cox	Term expires 1992
	Wayne Swann	Term expires 1992

Management Research Committee

Chairman -	Joe Satterfield	Term expires 1990
	Paul Weatherby	Term expires 1991
	Doyle Hines	Term expires 1991
	Jim Kiley	Term expires 1990
	Wayne Johnson	Term expires 1992

A. All committee members and officers are elected for three-year terms as noted.

b. Chairman of each standing committee named by the Nominating Committee and serves three years when elected, unless completing an unexpired term as a replacement.