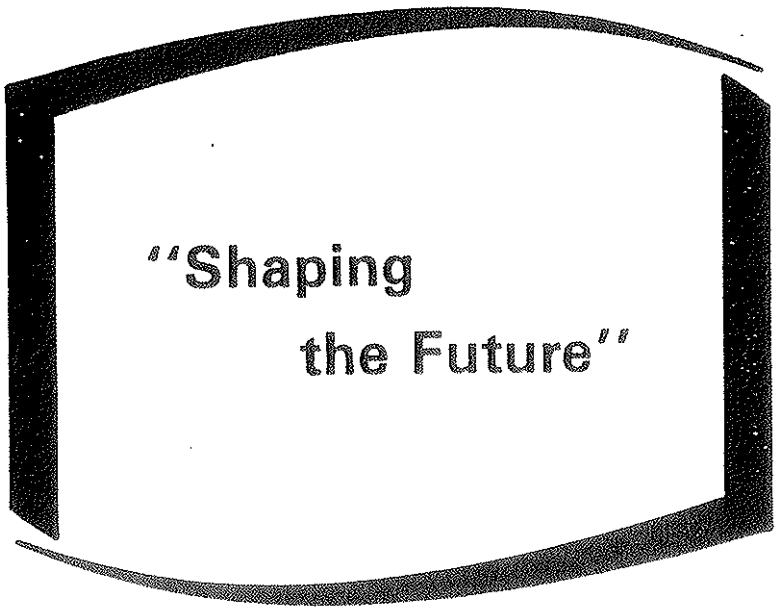
Proceedings of the
29th Annual Conference
Of
The Rural Electric Management Development Council



Sheraton Inn
Myrtle Beach, South Carolina
May 19-22, 1986

PROCEEDINGS OF THE

29TH ANNUAL CONFERENCE

OF THE

RURAL ELECTRIC MANAGEMENT DEVELOPMENT COUNCIL

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Sheraton Inn
Myrtle Beach, South Carolina
May 19-22, 1986

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S C O P E

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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.

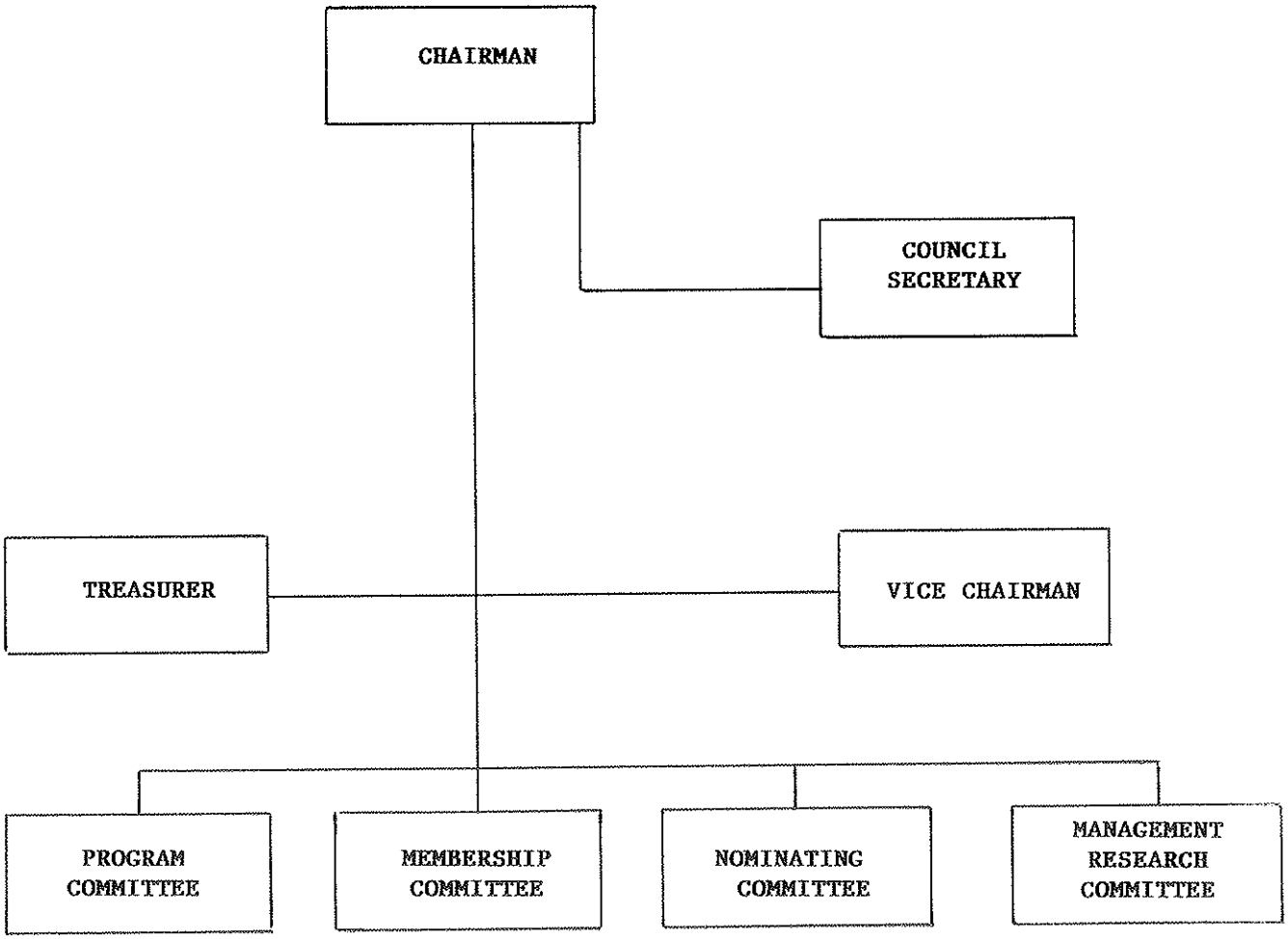
TREASURER	To collect all monies due the Development Council including regular membership dues and special assessments. To pay all bills submitted in proper form. To prepare an annual financial statement and forward to the Secretary for inclusion in the annual conference summary. Term of office to be 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 1986

Officers

Chairman -	Barbara Deverick	Term expires 1987
Vice Chairman -	Harold Smith	Term expires 1987
Treasurer -	Allen Ritchie	Term expires 1986
Secretary -	Christine Beane	(Appointed annually)

Standing Committees

Program Committee

Chairman -	James Kiley	Term expires 1986
	Dave Larson	Term expires 1988
	Craig DeBower	Term expires 1987
	Bill Ward	Term expires 1987

Nominating Committee

Chairman -	James Golden	Term expires 1986
	W. R. Fleming	Term expires 1987
	Mike Gustafson	Term expires 1987
	Dave Dunnell	Term expires 1988

Membership Committee

Chairman -	Phyllis Barber	Term expires 1988
	Dick Seger	Term expires 1986
	Robert Roberts	Term expires 1987
	Ev Bristol	Term expires 1988

Management Research Committee

Chairman -	Wayne Keller	Term expires 1988
	Wayne Johnson	Term expires 1986
	Doyle Hines	Term expires 1988
	Paul Weatherby	Term expires 1987
	Elmer Stocker	Term expires 1987

A. All committee members and officers elected 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

1986 ANNUAL CONFERENCE REGISTRATION

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

Blue Ridge Electric Membership Corporation
Caller Service 112
Lenoir, North Carolina 28645
Wayne Keller, General Manager
Barbara Deverick, Administrative Manager
Christine Beane, Director of Office Services

Cass County Electric Co-op, Inc.
P. O. Box 8
Kindred, North Dakota 58051
Victor Knudson, Manager, Administration and Finance

Central Area Data Processing Center
P. O. Box 408
St. Peters, Missouri 63376
Gary Hobson, General Manager

Clark County Rural EMC
609 East Utica Street
Sellersburg, Indiana 47122
Wayne W. Johnson, General Manager
Sharon Kleehamer, Manager of Office Services

Cobb Electric Membership Corporation
P. O. Box 369
Marietta, Georgia 30061
Bob Elsberry

Delaware Electric Co-op, Inc.
P. O. Box 600
Bridgeville, Delaware 19933
E. Paul Bienvenue, General Manager
Layton Wheeler, Manager, Member Services
Fay P. Shockley, Manager, Personnel

Flint Electric Membership Corporation
P. O. Box 308
Reynolds, Georgia 31076
Harold B. Smith, General Manager
Opal Wilder, Manager of Human Services

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

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

Lumbee River Electric Membership Corporation
P. O. Box 830
Red Springs, North Carolina 28377
Audrey Smith, Administrative Services

Morgan County Rural Electric Membership Corporation
P. O. Box 1716
Martinsville, Indiana 46151
Richard P. Seger, Manager

Northeastern REMC (Whitley REMC)
P. O. Box 171
Columbia, Indiana 46725
Carl Sederland, Interim Manager

Randolph Electric Membership Corporation
P. O. Box 40
Asheboro, North Carolina 27203
Allen Holt, Plant Manager

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

Southeast Iowa Electric Association
P. O. Box 440
Mt. Pleasant, Iowa 52641
Craig DeBower, General Manager

Sioux Valley Empire Electric Association, Inc.
P. O. Box 216
Colman, South Dakota 57017
James M. Kiley, General Manager
Dave Schornach, Staff Assistant

Union REA, Inc.
P. O. Box 359
Brighton, Colorado 80601
Ed Meier, Manager of Office Services

Yampa Valley Electric Association, Inc.
Box 1218
Steamboat Springs, Colorado 80477
Jim Golden, General Manager
Ev Bristol, Chief Engineer

Guest Registration - 1986

Joe Hanson, Area Representative
National Rural Electric Cooperative Finance Corporation
Washington, D. C.

Greg Boudreaux, Management Services
Martin Lowery, Management Services
National Rural Electric Cooperative Association
Washington, D. C.

Kenneth A. Hazelwood, General Manager
Salt River RECC
Box 609
Bardstown, Kentucky 40004

George L. Weaver, Manager
Central Georgia EMC
Box 309
Jackson, Georgia 30233

Daniel L. Kessler, Jr., Manager
Wells REC
Box 365
Wells, Nevada 89835

Hollis "Gene" Joslin, Manager
Johnson County Electric Cooperative
Box 16
Cleburne, Texas 76031

Joe Satterfield, Manager
Blue Ridge Mountain EMC
P. O. Box 8
Young Harris, Georgia 30582

Derl J. Hinson, General Manager
Marlynn G. Cox, Executive Secretary
Four County Electric Power Association
P. O. Box 351
Columbus, Mississippi 39703

Joseph W. Sloan, Manager
Anoka Electric Cooperative
2022 North Ferry Street
Anoka, Minnesota 55303

Joe Wells
Glenn Cannon
Santee Cooper
Myrtle Beach, S. C.

David Batten, Manager
Brunswick EMC
Box 826
Shallotte, N. C. 28459

James Hubbard, Executive Vice President
N. C. Association of Electric Cooperatives
P. O. Box 27306
Raleigh, North Carolina 27611

Don Norris, Manager
East Kentucky Power Co-op
P. O. Box 707
Winchester, Kentucky 40391

William Walbridge, General Manager
Seminole Electric Co-op, Inc.
P. O. Box 272000
Tampa, Florida 33688

Anthony Pisano, National Director of Marketing
Alexander Grant & Company
31st Floor
605 Third Avenue
New York, New York 10158

Andrew Weiner
114 Seaton Building
University of Kentucky
Lexington, Kentucky 40506

RURAL ELECTRIC MANAGEMENT DEVELOPMENT COUNCIL 1986 MEMBERS

Don Murray, General Manager
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P. O. Box 130
Gettysburg, Pennsylvania 17325

Wayne D. Keller, Executive Vice President
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Caller Service 112
Lenoir, North Carolina 28645

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St. Peters, Missouri 63376

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L. P. (Bill) Beverage, General Manager
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Burgaw, North Carolina 28425

Doyle Hines, General Manager
Guadalupe Valley Electric Cooperative
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Gonzales, Texas 78629

John A. Cheney, General Manager
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Red Springs, North Carolina 28633

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Maquoketa Valley Rural Electric Co-op
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Virginia, Minnesota 55792

Robert L. Roberts, Manager
Pioneer Rural Electric Cooperative, Inc.
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Bob McDuffie, General Manager
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Dayton, Virginia 22821

Jim Kiley, General Manager
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Craig DeBower, Manager
Southeast Iowa Electric Association
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Mt. Pleasant, Iowa 52641

General Manager
Southeastern Illinois Electric Cooperative
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Eldorado, Illinois 62930

John C. Anderson, General Manager
Southside Electric Cooperative
P. O. Box 7
Crewe, Virginia 23930

R. L. Arnold, General Manager
Union REA, Inc.
P. O. Box 359
Brighton, Colorado 80601

Elmer Stocker, General Manager
Whitley County REMC
P. O. Box 171
Columbia City, Indiana 46725

David P. Larson, Manager
Wright-Hennepin Cooperative Elec. Assoc.
Maple Lake, Minnesota 55358

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

Program

Monday, May 19

1:00 p.m.	Registration
1:30	Welcome and comments - Barbara Deverick Chairman REMDC, Blue Ridge EMC, North Carolina
	Program Overview - Jim Kiley, Program Chairman Sioux Valley Empire Electric Association, Inc.
1:45	Management Challenges with Long-Term Employees - Wayne Keller, Chairman REMDC Research Committee, Blue Ridge EMC, North Carolina
	One System's Experience Jim Golden, Yampa Valley EMC, Colorado
	A Look at Some of the Long Term Implications Andrew Weiner, Ed. D., Associate Professor/ Consultant Employee Services, University of Kentucky
	and
	Greg Boudreaux, Coordinator, Program Development, NRECA
3:00	Break
3:15 - 4:00	The above panel continues.
4:00 - 4:30	"Something About Some Things" - Charles Weaver, Director of Borrowers Division, REA

Tuesday, May 20

9:00 a.m.	Utilizing the Critical Task Analysis Model in Performance Evaluations Wayne Johnson, Clark County EMC, Indiana
9:30	Consumer Information and Control Metering System Joe Sloan, Anoka Electric Cooperative, Minnesota
10:15	Break
10:30	Use of Small Employee Groups as a Communications Vehicle Dave Schornack, Sioux Valley, South Dakota
11:00	Telecommunications Update Gary Hobson, Central Area Data Processing Corporation, St. Louis, Missouri
12:00 noon	Lunch
1:30-4:30	**The Effects of G & T/Distribution System Relations on Strategic Power Supply Planning**

The following persons will make up the panel of Generation/Transmission and Distribution cooperative managers who will present their individual views on this subject:

William (Bill) Walbridge, General Manager
Seminole Electric Co-op, Inc. (G & T)
Tampa, Florida

Don Norris, Manager
East Kentucky Power Co-op (G & T)
Winchester, Kentucky

Bob Roberts, Manager
Pioneer Rural Electric Cooperative, Inc.
Piqua, Ohio (served by Buckeye G & T)

Harold Smith, General Manager
Flint Electric Membership Corporation
Reynolds, Ga. (served by Oglethorpe G & T)

Anthony Pisano, National Director of Marketing, Alexander Grant & Company (formerly with AMA), will moderate panel

6:30-7:30	*Reception - The Dunes Club - Courtesy Southern Engineering - Tab Stogner

*Men please wear coats and ties.

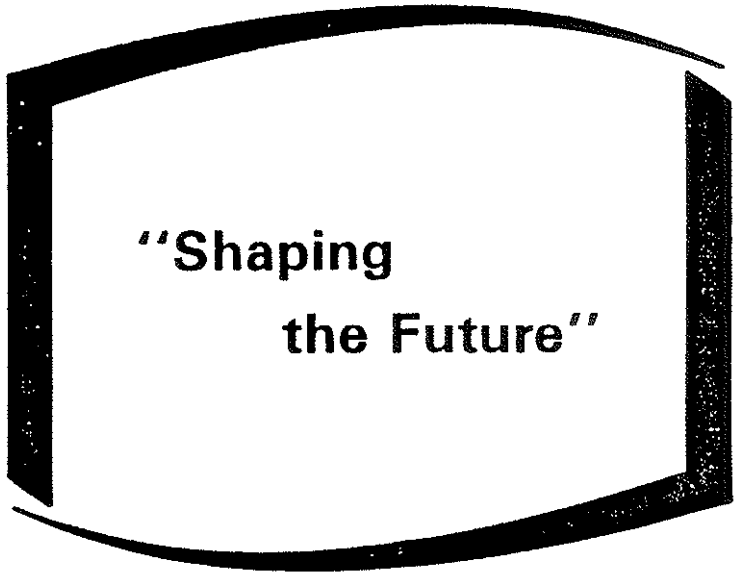
Wednesday, May 21

8:30 a.m.	Anthony Pisano will present some challenging questions to the council members on issues addressed by the panel on Tuesday afternoon and propose some specific actions to improve strategic power supply planning and relationships between G & T and Distribution Cooperatives.
12 noon	Lunch
Wednesday Afternoon	Golf - Marsh Harbor Course beginning at 1:00 p.m. Those not participating in the golf tournament may spend the afternoon shopping, sight seeing, sunning, etc.

Thursday, May 22

8:30 a.m.	New Programs and Emphasis at NRECA Management Services - Martin Lowery, Manager, Consulting and Training, NRECA
9:15	New Program and Concerns at CFC Joe F. Hanson, Director of Policy and Internal Audit, CFC
10:00	Business Meeting
12:00 Noon or Prior	Adjourn

The Rural Electric Management Development Council



May 19 - 22, 1986
Sheraton Inn
Myrtle Beach, South Carolina

INTRODUCTION TO
DISCUSSIONS ON
"MANAGEMENT CHALLENGES WITH LONG-TERM EMPLOYEES"

Wayne D. Keller, Chairman, REMDC Research Committee
(Executive Vice President, Blue Ridge EMC)

Prior to selecting a topic for the REMDC Research Committee, Mr. Keller stated a survey was sent out to all REMDC member cooperatives asking for input. From several ideas submitted, there appeared to be a lot of interest in management challenges with long-term employees. Mr. Keller said this area is a big challenge to all of us, as managers and as we, ourselves, become long-term employees. He related that to date, Blue Ridge EMC has had 29 retirements and six disability related retirements. In the next ten years, forty employees will reach retirement age. As these employees reach retirement age, it is an on-going challenge to keep them happy and productive.

The members want cooperatives to have the lowest possible cost; yet, lean staffing reduces flexibility. He also stated long term employees are less flexible to change.

Mr. Keller introduced Jim Golden, Yampa Valley REC; Andrew Weiner, University of Kentucky; and Greg Boudreaux, NRECA, for discussions relating to "Management Challenges with Long Term Employees."

RESULTS OF REMDC RESEARCH COMMITTEE SURVEY ON INTERNAL CONCERNS

Priority

1. **Management Challenges with Long-Term Employees:**

   a. Implementing new ideas and concepts.
   b. Maintaining commitment to cooperative.
   c. Operating with lean staff - longer vacation time and less flexible to change.

2. **Organization Development Challenges:**

   a. Recruiting qualified people.
   b. Back-up for key positions.
   c. Effective use of temporary and/or part time employees.
   d. Developing commitments to cooperative and acceptance of changes by new employees.
   e. Long range human resource planning.

Other Management Concerns:

(1) Data processing - state-of-the-arts
(2) Employee training
(3) Effective performance standards
(4) Effective wage and salary programs based on performance
(5) Keeping pace with pay, benefits, etc. while facing impact of finance, power supply, economic conditions in rural America, etc.
(6) Member communication - getting closer to member

2-26-86

James Golden, General Manager
Yampa Valley Electric Assoc.
Steamboat Springs, Colorado

YAMPA VALLEY ELECTRIC ASSOCIATION, INC.
P. O. BOX 1218 * STEAMBOAT SPRINGS, COLORADO 80477 * TELEPHONE 879-1160

NOTICE!!!

Y.V.E.A.
EMPLOYEE/SPOUSE MEETINGS

CRAIG - MONDAY, MARCH 29, 7:00 P.M., OFFICE

STEAMBOAT - TUESDAY, MARCH 30, 7:00 P.M., COFFEE ROOM

AGENDA

1. INTRODUCTION AND GENERAL OVERVIEW OF Y.V.E.A. PROGRAM.

2. REVIEW OF EACH SPECIFIC BENEFIT FROM CURRENT OPERATING PROCEDURE NO. 107 (UPDATED 3/15/82).

3. DISCUSSION OF MEDICAL BENEFITS (DOUG ROWLAND, EMPLOYEE BENEFIT SPECIALISTS, WILL BE PRESENT AT BOTH MEETINGS).

4. GENERAL QUESTIONS AND ANSWERS - AS LONG AS YOU WANT.

LIGHT REFRESHMENTS WILL BE SERVED.

YAMPA VALLEY ELECTRIC ASSOCIATION

MEMORANDUM

January 21, 1986

FROM: James Golden, General Manager

TO:

Lindley	Henderson	Kennedy
Bauer	Howe	McCarty
Worrell	Simpson	Stoddard
Duzik	Bingham	Marumoto
Bristol	Simillion	Lewis
Cantwell	Bostock	Chockley

Y.V.E.A. is sponsoring a Pre-Retirement Workshop for employees 55 years of age or older as outlined on the attached agenda.

Spouses of participants are welcome and are encouraged to attend. Lunch will be provided at the Overlook Hotel.

If you have any questions or suggestions, please check with Ev Bristol.

PRE-RETIREMENT WORKSHOP

Overlook Hotel
Steamboat Springs, Colorado
Friday, February 7, 1986

SCHEDULE

9:00 - 9:30	Introduction - Bill Hill
9:30 - 10:30	#1 - Wellness, Physical & Mental - Larry Allingham
10:30 - 10:45	Break
10:45 - 11:45	#2 - Social Security - Rick Itao
11:45 - 1:00	Lunch
1:00 - 2:00	#3 - Financial Planning - Bill Haight
2:00 - 3:00	#4 - Legal Matters, Wills, Estates - Vance Halvorson
3:00 - 3:15	Break
3:15 - 4:15	#5 - Housing & Life Style - Jack Morrison

"Workers Over 50: Old Myths, New Realities"

Nationwide Survey of 400 U.S. Corporations of U.S. Workers Over Age 50
By Yankelovich, Skelly and White, Inc.

- Employers give older workers their highest marks for productivity, attendance, commitment to quality and satisfactory work performance.

- The survey also contradicts the belief that older workers are inviting targets for business cost-cutting because of their high salaries and benefit costs. The overwhelming majority believe that "the cost of older workers is justified when you consider their value to the company".

- On the negative side, employers give older workers their lowest rating in the survey on their acceptance of new technologies.

- The study also found some negative perceptions among employers of older workers' competitiveness, flexibility and adaptability in learning new job skills.

Source: AARP News Bulletin - May 1986

IT'S WHAT YOU DO -
NOT WHEN YOU DO IT.

Ted Williams, at age 42,
slammed a home run
in his last official time at bat.

Mickey Mantle, age 20,
hit 23 home runs
his first full year in the major leagues.

Golda Meir was 71 when
she became Prime Minister of Israel.

William Pitt II was 24
when he became
Prime Minister of Great Britain.

George Bernard Shaw was 94
when one of his plays was first produced.

Mozart when just seven
when his first composition
was published.

Now, how about this?
Benjamin Franklin
was a newspaper columnist at 16,
and a framer of The United
States Constitution
when he was 81.

You're never to young
or too old
if you've got talent.
Let's recognize
that age has little to do with ability.

The Wall Street Journal, 11/7/85

A LOOK AT SOME OF THE LONG TERM IMPLICATIONS

Andrew Weiner, Ed.D., Associate Professor/
Consultant Employee Services
University of Kentucky

We each have different perceptions concerning who is the older worker. How do we deal with these perceptions and stereotypes?

In the future, we will probably be seeing a larger number of older workers. A lot of people do choose to retire early for health or other reasons or can afford to financially.

A number of jobs in the future may be reduced because of technology. We still do not know the full impact of technology.

A big question is whether or not Social Services will be able to support a large number of retirees. When the "baby boomers" move into the retirement age, we may see some changes.

Who is the older person? How do we deal with him/her?

Types of older worker:

1. Workers near retirement age who wish to remain on the work force in some capacity. (IBM encourages diversity of skills.)

2. Retirees who want to return to the work place with a former employer or with other firms. (Problem is picking up benefits for that age.)

3. Displaced homemakers - older women who have lost source of support through death, divorce, etc.

4. Dislocated older worker who has lost job through plant closings or mass lay-offs.

5. Economically disadvantaged older people who have not had the resources to plan for their retirement or develop the skills they need for new jobs.

An older worker has a certain amount of anxiety - a certain amount is good but too much can cause problems. Reduce the number of simultaneous demands made on the older worker. The learning process may need to be changed for the older worker. Mature adults want more than one choice, some input, more opportunity to interact. (Medication may affect the learning process.)

Statistics show younger employees take more sick leave than older workers. Most older workers are debt free. Work ethics have changed. The older worker is a product of his generation. Not as many options years ago as younger workers now have.

If rehiring an older worker, should screen very closely. Some older workers are more reluctant to change. Help the older worker to be receptive to change. They must realize that change will not destroy them.

"Going native" - believing everything anyone tells them outwardly - inwardly they are resisting. Resisting is normal and natural.

A gradual retirement is good for some people - go from eight hours a day to six hours, split jobs, etc. It may be hard to do this in smaller firms.

Statistics show older workers have fewer accidents than the younger workers.

Keep the older worker involved - give them new projects to work on. Keep down boredom. We are too quick to sterotype people. In career planning, encourage developing other skills.

Adult Lifestyle Stages

The Mellowing (Age 56-64)	1. Adjust to health problems. 2. Deepen personal relations. 3. Prepare for retirement. 4. Expand avocational interests. 5. Finance new leisures. 6. Adjust to loss of mate.

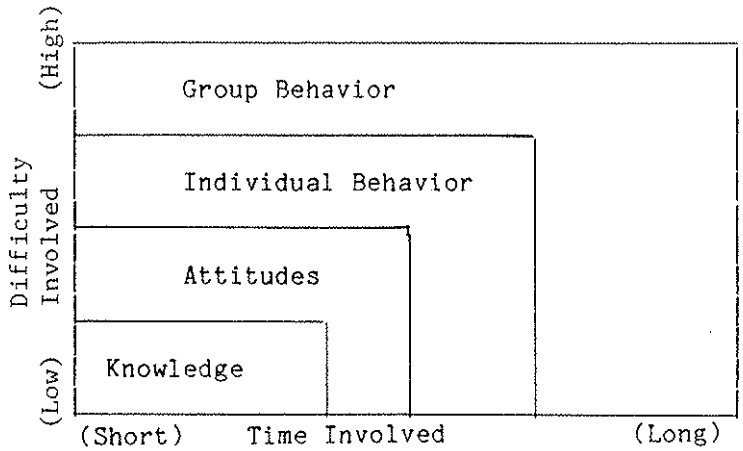
Midlife Issues

1. Fear of getting lost in shuffle.
2. Become unresponsive because of being in job too long.
3. Family relationships changing.
4. Aging parents.
5. Health.
6. Finances.
7. Working relationships with younger employees.
8. Sex.
9. Uncertainty about future.
10. Goals may not have been realized.
11. Death of loved one - chronic illnesses.

Why People Resist Change

1. Self-interest - people think they will lose something.
2. Misunderstanding - employees may not understand implication of change.
3. Different assessments - difference in knowledge, analysis, in conclusions.
4. Low tolerance for change - fearful of coping with new environment.

People fear change because they feel out of control. Some employees begin to feel like victims.



Type and Difficulty Involved in Making Various Changes

Phases of Change Process

1. Unfreezing
2. Changing
3. Refreezing

(Do not make employees feel guilty about making changes.)

Transitional Coping Styles

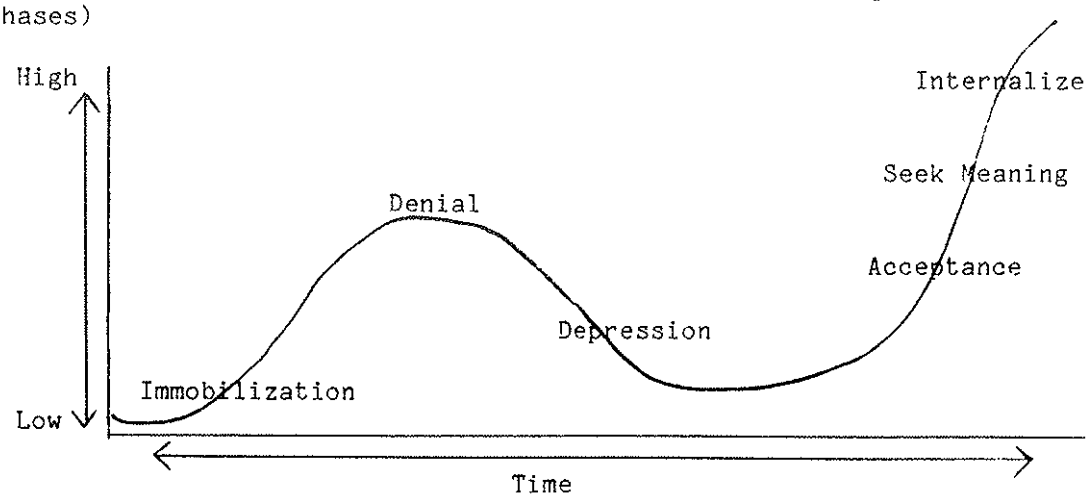
1. Reactionary (passive aggressive).
2. Giving notice.
3. Self-confronting (most desirable way to deal with change).
4. Whatever you say is OK with me.
5. Honest enough to talk about it - best possible stage.

Transitional Phases

	Employee	Supervisory Strategy
Unfreezing	1. Immobilization	Accepting, understanding, not much pressure
	2. Denial	"Question" validity of denial
	3. Anger	Accept ligitimate feelings of anger
	4. Depression	Support, gentle pressures
Changing	5. Acceptance	Exploration of options and new ideas
Refreezing	6. Seeking meaning	
	7. Internal	

Self-Esteem Graph

(Graph illustrates the rise and fall of self-esteem during the transitional phases)



Change is evolutionary, not revolutionary.

De-radicalize change.

If an employee does not reach the acceptance stage, may need counseling. When you deal with older workers, change is instrumental.

(Certainty of misery - sometimes better than misery of uncertainty.)

Everyone has their own motivational blue print. Management needs to know these blue prints in order to help employees.

Some companies have pre-retirement programs. Career counseling important for retiring people. Transitional programs important.

Options for part-time work for older worker:

1. Pre-retirement counseling/education. (Motivates employee - says you care. Good morale booster. Tells people they are retiring to something. rather than from something.) Focus on attitude. Helps trim labor force.
2. Part-time work - seasonal or project basis. Employee leasing - retired employee pools. Contract particular skills needed.
3. Career counseling - training for new career.
4. Transition programs - phased retirement, 6 months sabbatical.
5. Job re-design (2 workers split one job).

(Available resources - copy attached.)

A FACT SHEET

ON

AGING PATTERNS

* In 1985, 26 million (11%) of the population is age 65 and over.

* In 2000, 32 million (12%) of the population will be age 65 and over.

* In 2025, more than 50 million (approx. 20%) of the population will be age 65 and over.

* Persons age 55 and over; now 46 million in number will increase to 55 million by the year 2000.

* Between 1985 and 2000 the median age will increase from 30 to approximately 36 and life expectancy at birth and older ages will continue to edge upward.

* Between 1985 and 2000 there will be a decline in the age group of 18-34 of almost 8 million.

* Between 1985 and 2000 there will be an increase in the age group 35-54 ("prime working age") of about 28 million.

* After the turn of the century there will be a large increase in older persons and a relative stabilization of young and middle aged.

* In the labor force as of 1985 less than 3% of the labor force is age 65 and over and labor force participation for this age group and persons 55-64 is decreasing.

* Between 1985 and 2000 the number of middle aged workers particularly women will increase significantly while younger workers will decline.

Source: Morrison, Malcolm. "Retirement 2001: A Futuristic View" Retirement Planning, Spring, 1984.

LIFE AND CAREER NEEDS

EACH OF US PLACES DIFFERENT EMPHASIS ON SATISFYING PERSONAL NEEDS. AS A GUIDE IN LIFE AND CAREER PLANNING WE NEED TO ASSESS THE IMPORTANCE OF THESE VARIOUS NEEDS. FROM THE PERSONAL NEEDS LISTED BELOW:

1. CIRCLE THE FIVE PERSONAL/CAREER NEEDS WHICH ARE MOST IMPORTANT TO YOU IN THINKING ABOUT YOUR LIFE.
2. CROSS OUT THE FIVE WHICH ARE LEAST IMPORTANT TO YOU.
3. ADD OTHERS WHICH MAY NOT APPEAR ON THE LIST.

FREE TIME	EDUCATIONAL FACILITIES
MONEY	TIME WITH FAMILY
SECURITY	ENJOYABLE WORK
FRIENDS	PROFESSIONAL STATURE
RECREATION	RESPONSIBILITY
CLIMATE	FREEDOM FROM WORRY
POWER	CULTURAL OPPORTUNITIES
EXPERTISE	LEADERSHIP
INDEPENDENCE	VISIBILITY
CHALLENGE	RECOGNITION
PRESTIGE	GEOGRAPHIC LOCATION

A. IF FORCED TO COMPROMISE ANY OF THE THINGS I WANT, I'LL GIVE UP _____.

B. I WILL BE MOST RELUCTANT TO GIVE UP _____.

Myths and Realities About Older Workers*

Questions

True or False

_____ 1. The age at which one is generally perceived as being an "older worker" varies according to place and type of employment.

_____ 2. As a worker ages, his/her intelligence and learning ability decline.

_____ 3. Older workers are more likely to be absent from work than younger workers due to age-related health problems and above average rates of illness.

_____ 4. An older worker is as productive as the average worker.

_____ 5. Accident rates at work are the highest for older workers.

_____ 6. Older workers are less motivated than other workers.

_____ 7. Older workers are generally perceived to be more resistant to change than younger workers and as a consequence receive fewer training opportunities.

_____ 8. Compared to younger workers, older workers are not worth the investment to train or hire.

_____ 9. Older workers are more difficult to supervise than younger workers and in general do not get along with younger workers.

_____ 10. In general, older workers want to work part or fulltime as an alternative to retirement, but there are few opportunities for doing so.

_____ 11. There are few advantages to hiring or keeping an older worker.

*A quiz developed by Andrew Weiner, Associate Professor, 114 Seaton Building, University of Kentucky, Lexington, Kentucky 40506. (606) 257-1625.

Myths & Realities About Older Workers

Answers

1. TRUE - The definition of who is an "older worker" raises significant conceptual and jurisdictional problems. The Age Discrimination in Employment Act sets a lower limit of 40 years old. The Department of Labor considers those 45 and over to be "mature workers." The Administration on Aging identifies 55 as a cut-off. There is a consensus developing that age 50 is the most commonly accepted age since participation in the workforce remains fairly static from ages 35-50 and after 50 participation rates decline. However, for functional purposes, an older worker is anyone for whom age is a negative factor in their employment, meaning that the perception of who is an older worker varies with the work environment.

2. FALSE - The key finding in terms of intelligence is that age-related declines are minimal for many intellectual functions. Current research has documented that when there is a marked decline in the intellectual functioning of an older person it is usually the result of disease rather than age. According to a summary of cross-sectional literature, the age-intelligence relationship tends to be small with decline not setting in until relatively late in life. When it does, memory, speed of response and perceptual integrative functions are involved.

3. FALSE - Older workers' attendance at work is as high or better than younger workers' attendance. One study found that among men in manufacturing plants, absenteeism was about the same for those over 65 as for those 35 to 64 but absenteeism was higher among those under age 35. Since poor health is a primary reason for selecting an early retirement many older workers with health problems have retired. The reserve capacity of older people becomes depleted leaving individuals more susceptible to illness and requiring longer periods for recovery. Chronic disease becomes more prevalent with 85 percent of those over 65 reporting at least one such disease. As a final note it should be recognized that not all older persons experience physical changes at the same age. Chronological age by itself cannot be used as an accurate indicator of either the health status or the physical capacity of older workers.

4. TRUE - Research shows that productivity does not decline with a worker's age. Despite age related changes, research studies over the last 30 years have documented that chronological age is not inevitably correlated with productive capability. Most jobs do not fully tax the physical capacities of the majority of older workers. In fact, with the shift toward services most jobs in the future will be less physically demanding. In general, older employees work as well as younger employees and meet the productivity expectations of their companies.

5. FALSE - Data indicate that older workers account for only 9.7% of all workplace injuries despite the fact that they make up 13.6% of the labor force. Older workers have fewer accidents in situations that require judgement based on experience and expectations of hazards.

6. FALSE - This is a difficult area to draw conclusions about since motivation is the result of the complex interaction of numerous factors i.e. family envrionment, nature of job and work environment. In terms of job satisfaction, the results are mixed. Some studies report that older workers demonstrate greater job satisfaction than younger workers while another study indicates that relative importance of intrinsic work satisfaction as a determinant of the individual's sense of global well being declines during the later stages of labor force participation. Considerable research suggests that motivation is probably most affected by external psychological changes associated with the aging process.

7. TRUE - A 1984 study conducted by The Conference Board revealed that a majority of the employers surveyed perceived older workers to be less flexible and more resistant to change. Older managers, professionals and technicians were perceived to be more flexible and less resistant to change than older white collar workers and blue collar workers.

8. FALSE - There is little reason to believe that job preparation (training & orientation) of older workers is more costly than for other age groups. Employers should, of course, consider the most cost-effective ways of preparing older workers for a new job such as the use of practical exercises and on-the-job training.

   The costs of some benefits (such as health, disability and life insurance) typically do increase with a worker's age. Other fringe benefits, however, are more closely tied to length of service and level of salary. A study of employment costs at a major corporation found it was not safe to assume that older workers cost more or less than younger workers.

9. FALSE - Studies indicate that older workers have records as good or better than younger workers in terms of interpersonal relationships, dependability and job commitment. Business owners who hire older workers find that they can bring stability to the workplace and that they often serve as role models to younger adults.

10. TRUE - Despite the trend toward early retirement, studies indicate that many retirees would prefer to work in some capacity either part-time or full-time if given the opportunity. Fear of losing social security income, negative stereotypes about the older person and inflexible work arrangements account for some of the reasons that many retirees don't work. Yet, according to a recent Harris poll, over 25% of the retirees in the U.S. work part or full-time and a greater percentage would prefer to work. Alternative work arrangements such as job sharing, flex time, job redesign, phased retirement and experimental retirement appear to be the kinds of programs that will be used in the future to maximize the productivity of older workers.

11. FALSE - Unfortunately many employers do share the view that hiring or keeping older workers presents few advantages. These perceptions are largely the result of negative stereotyping of older workers.

In terms of older employees' contributions to the economy, it has been estimated that the added contribution of older workers will increase the gross national product by $18 billion annually by 1985, $45 billion by 1990 and nearly $200 billion by 2005. This would certainly provide the economic base for retraining programs or retention incentives.

Actually there are a number of reasons why it's "good business" to attract and/or retain older workers: (1) Retaining valued employees (especially those with specialized skills who understand the business), (2) increasing flexibility in the workforce (many older workers are willing to work in a variety of arrangements i.e. job share, part-time, holiday seasons, and serve as a temporary labor pool), (3) stabilizing the younger workforce (older workers are less likely to leave), (4) exemplifying strong work ethic and loyalty to the firm, (5) serving as a role model for younger workers, (6) supplementing the younger workforce (given the upcoming shortage of younger workers there may be a greater need for older workers to occupy jobs), (7) maintaining a desired public image (projecting a vision of being socially responsible and employee-oriented), (8) attracting older consumers (those 55 and over account for over one-fourth of all consumer purchases and older workers represent this important segment of the market), (9) responding to government policies [conforming to government policies such as The Age Discrimination in Employment Act (ADEA) and changes in The Employment Retirement Income Security Act (ERISA)] and (10) gaining experience in managing the older workforce of the future (it appears that we will have an older workforce in the decades ahead so it pays to get experience now in the management of this group of workers).

References for Quiz

Franz, John. "Cognitive Development and Career Retraining in Older Adults." Educational Gerontology, 9, 1983.

National Alliance of Business. Invest in Experience: New Directions for An Aging Workforce: An Analysis of Issues and Options for Business. Washington, D.C.: NAB Clearinghouse, 1985.

Special Committee on Aging, U.S. Senate. Personnel Practices for An Aging Work Force: Private-Sector Examples. Washington, D.C.: U.S. Government Printing Office, 1985.

Fleisher, Dorothy and Barbara Hade-Kaplan in Ragan, Pauline (Ed). "Characteristics of Older Workers: Implications for Restructuring Work." Work and Retirement: Policy Issues. Los Angeles: Ethel Percy Andrus Gerontology Center, University of Southern California Press, 1980.

The Travelers Corporation. Business Issues in An Aging America. Hartfield, Connecticut: Travelers Corporation, 1982.

Kaminsky, Victoria. "Designing a Seminar for Managers of Older Workers." Training & Development Journal, July, 1983.

Bourne, Bonnie. "Effects of Aging on Work Satisfaction, Performance and Motivation." Aging & Work, 5(1), 1982.

Cohn, Richard. "Age and The Satisfactions from Work." Journal of Gerontology, 34(2), 1979.

Palmore, Erdman. "The Facts on Aging Quiz: Part Two." The Gerontologist, 21(4), 1981.

RESOURCE ORGANIZATIONS

Business-Oriented Organizations That Address Older Worker Issues

American Management Association
135 W. 50th Street
New York, NY 10020
(212) 586-8100

Business Roundtable
200 Park Avenue, Suite 2222
New York, NY 10166
(212) 682-6370

Chamber of Commerce of the U.S.
Employee Benefits and Policy Center
1615 H Street, N.W.
Washington, DC 20062
(202) 463-5514

The Conference Board
845 Third Avenue
New York, NY 10022
(212) 759-0900

National Alliance of Business
1015 15th Street, N.W.
Washington, DC 20005
(202) 457-0040

National Association of Manufacturers
1776 F Street, N.W.
Washington, DC 20006
(202) 626-3700

International Society of Preretirement Planners
2400 South Downing Street
West Chester, IL 60153
(312) 531-9140

Research Organizations with Particular Interest in Older Workers

Drexel Center on Aging
University of Maryland
College Park, MD 20742
(301) 454-5856

Employee Benefit Research Institute
2121 K St., NW #860
Washington, DC 20037
(202) 659-0670

Employment and Retirement Division
Andrus Gerontology Center
University of Southern California
University Park MC0191
Los Angeles, CA 90089-0191
(213) 743-6060

Institute of Gerontology
The University of Michigan
300 North Ingalls
Ann Arbor, MI 48109
(313) 764-3493

SRI International
Public Policy Center 333 Ravenswood Avenue
Menlo Park, CA 94025
(415) 859-3835

Urban Institute
Income and Retirement Security Program
2100 M Street, N.W.
Washington, DC 20037
(202) 833-7200

Work in America Institute
700 White Plains Road
Scarsdale, NY 10583
(914) 472-9600

A Sample of Older Worker Assistance Organizations

Operation ABLE
36 S. Wabash
Chicago, IL 60603
(312) 782-3335

Displaced Homemakers Network, Inc.
1010 Vermont Ave., NW #817
Washington, DC 20005
(202) 628-6767

Forty-Plus (National Office)
1718 P Street, N.W., Suite T-4
Washington, DC 20036
(202) 387-1582

New Ways to Work
149 Ninth Street
San Francisco, CA 94103
(415) 552-1000

Organizations Representing Older Adult Interests

American Association of Retired Persons and
National Older Workers Information System (NOWIS)
1909 K Street, N.W.
Washington, DC 20049
(202) 872-4700

American Society on Aging
(formerly Western Gerontological Society)
833 Market Street, Suite 516
San Francisco, CA 94103
(415) 543-2617

Gerontological Society of America
1411 K St., NW, Suite 30
Washington, DC 20005
(202) 393-1411

Gray Panthers
311 South Juniper St., Suite 601
Philadelphia, PA 19107
(215) 545-6555

National Association of Area Agencies on Aging
600 Maryland Avenue, S.W., Suite 208
Washington, DC 20024
(202) 484-7520

National Association of State Units on Aging
600 Maryland Avenue, S.W., Suite 208-W
Washington, DC 20024
(202) 484-7182

The National Caucus and Center on Black Aged, Inc.
1424 K Street, N.W., Suite 500
Washington, DC 20005
(202) 637-8400

National Council on the Aging, Inc.
600 Maryland Avenue, S.W.
Washington, DC 20024
(202) 479-1200

National Council of Senior Citizens
925 15th Street, N.W.
Washington, DC 20005
(202) 347-8800

Older Women's League
1325 G Street, NW
Washington, DC 20005
(202) 783-6686

Government Offices Working on Older Worker Issues (State and local governments, particularly the "aging network" of state and area agencies on aging, offer localized resources.)

Administration on Aging (AoA)
300 Independence Avenue, S.W., #4760
Washington, DC 20201
(202) 245-0724

Equal Employment Opportunity Commission
1717 H Street, N.W., Suite 400
Washington, DC 20506
(202) 653-6197

Office of National Programs for Older Workers
U.S. Department of Labor
Employment and Training Administration
601 D Street, N.W., Room 6122
Washington, DC 20213
(202) 376-6232

National Commission for Employment Policy (NCEP)
1522 K Street, N.W., Suite 300
Washington, DC 20005
(202) 724-1545

U.S. House of Representatives
Select Committee on Aging
712 House Annex #1
Washington, DC 20515
(202) 226-3375

U.S. Senate
Special Committee on Aging
SDG-33
Washington, DC 20510
(202) 224-5364

United States Department of Agriculture
Rural Electrification Administration
Washington D.C. 20250

MAY 15 1986

Mr. James Kiley
Sheraton Myrtle Beach Inn
Box 331, Oceanfront at 71st Avenue North
Myrtle Beach, South Carolina

Dear Jim:

First, please accept my regrets for my having to miss REMDC's 1986 Annual Conference.

While I am sorry not to be able to speak to the group this year, my real regret is not that you will miss my words but that I will miss this year's outstanding program and miss being able to trade ideas and concepts with the best management personnel mix in the rural electric program.

It is no secret to some of you long-time members that some years ago I was among those who doubted that the group was ever going to achieve its loftier goals. From the time you began to change membership criteria and standards and made steps toward research and broadening your impact on the whole program, we insider/outsiders could see and feel the difference. You are truly making a difference.

As to what I might have said from the platform its major thrust would have been essentially a reinforcement of your 1986 theme, "Shaping the Future." Nothing makes me more discouraged (angry?) than hearing people complain (or give up?) over things the Board and Manager "can't control." There may be some "sunk costs" we can't get back in power supply, for instance: yet, through good marketing with load factor improvement, we can make measurable progress. Then, through better load forecasting and GT/Member System strategic power supply planning, we can avoid the mistakes of the power supply-side "planning" of our recent history. I could go on with thoughts on the full-service cooperative and some more on the new membership but that would make this letter as long as my talk might have been.

Congratulations on a great program!

CHARLES R. WEAVER
Director
Program Support Staff

PRESENTATION FOR THE RURAL ELECTRIC MANAGEMENT DEVELOPMENT COUNCIL MEETING, May 19-22, 1986, Mytle Beach, S.C.

Wayne W. Johnson, Clark County REMC, Sellersburg, Indiana

UTILIZING THE CRITIAL TASK ANALYSIS MODEL IN PERFORMANCE EVALUATIONS

In late 1983 we began the process of developing the CTA model for use in performance evaluations. At that time we had not coined the name nor fully developed the elements of the model.

We began the process with a two day staff retreat which included using two other REMC managers. They role played being the board president and a consultant working with the General Manager to determine what his critical tasks were. The fact that the Manager was willing to be examined in front of the staff, helped convince the staff members that they should be willing to repeat the process with the Manager and the consultant.

Over the next several months, sessions were held with each staff member to determine their critical tasks, measures of success and appropriate behavioral skills needed to succeed. The activity phase came later as each staff member developed their own annual work program.

After a sharing session, in which each staff member had their critical tasks, measures of success and behavioral skills revealed and critiqued by all the staff, each was ready to begin the process with their own employees.

This has been done with varying degrees of success. Where the department manager has implemented the program by identifying the roles their own people play in the department manager's success, the program has been very beneficial to each employee. "I feel better about my job now than I have in fifteen years. I know what is expected of me and what I can do to be successful," is how one long-term employee expressed it.

I share the responsibility for the program not being implemented fully in the line operations area. We have made notable progress. We have been able to discipline and have seen changed behavior, without grievances or morale problems. I believe it has helped the department manager and his supervisors. There is, however, more progress to be made.

This summer we will begin our second phase in the program. Performance for the past year will be evaluated and next year's program of work laid out. We will expect to see the program become more specific for each department manager's

employees, particularly in terms of training and development goals and activities.

The program was begun for the General Manager in June of 1985. The board seemed to like it. I know the General Manager does. This year will be a test of how well it is understood.

In the meantime, my partner and I have made the program more generic in form and developed a one day training program for board members and managers to introduce the concept of CTA. This year we conducted training sessions for 130 Indiana directors and 24 REMC managers through our statewide human resources program. This fall we will hold sessions for General Managers and their staff utilizing generic CTA's for each major department manager position. These will be two-day sessions. We envision future programs for the department managers to help than develop the CTA's for their staff.

We hope to export the model to other states and rural electric systems. One of our 1987 goals is the development of a CTA for the rural electric board member.

Attached you will find a paper on our overall approach to developing our critical task analysis for every position in the cooperative.

Attached also are initial cuts we made for the position of General Manager and System Engineer. These will give you some idea of the direction we have taken.

DEVELOPING EFFECTIVE TEAM MANAGEMENT

-through task analysis, goal setting and performance evaluation

PHASE I THE PROCESS

PART I UNDERSTANDING THE PROCESS

A. identifying critical tasks using the 80-20 rule

B. selecting the appropriate tools to measure work performance

C. selecting acceptable behavioral skills

PART II APPLYING THE PROCESS

A. preparation of your own position analysis

B. reaching agreement with supervisor on your analysis

C. team review of all position analyses

D. establish a calendar for completion of all analyses

E. introducing the process to your employees

F. complete preparation of all analyses

G. review, revise and retrain for better analysis and use of the process

PHASE II MEASURING PERFORMANCE

PART I UNDERSTANDING AND USING THE TOOLS FOR PERFORMANCE EVALUATION

A. learning to use the measurement tools

B. learning to set achievable goals

C. selecting appropriate activities to improve performance

PART II APPLYING THE TOOLS TO YOUR OWN PERFORMANCE

A. self appraisal

1. grade performance using measurement tools

2. identify and set achievable goals

3. select appropriate activities to improve performance

B. review and reaching agreement with supervisor on performance appraisal

PART III USING THE TOOLS WITH OTHERS

A. establish schedule for all subordinates

B. introduce tools to subordinates

C. supervisor and subordinate make evaluations independantly

D. performance evaluation session to compare evaluations and reach a mutually acceptable workplan for performance enhancement

E. general session with all subordinates to identify strengths and problem areas with process and tools.

F. develop recommendations for improving program

PART IV DEVELOPING YOUR TRAINING WORKPLAN

A. assemble all the training activities which each employee has identified in their own evaluation

B. determine the most cost effective approach to meeting those training needs within the time frame of the individual workplans

C. secure approval of both the workplan and necessary financial resources to implement the training workplan

D. include your own development needs as identified in your own performance evaluation

PART V PERIODIC REVIEW AND CRITIQUE OF THE PROGRAM

A. utilize an external resource periodically to review and critique the effectiveness of your program

B. evaluate the follow through on skill and performance improvement committments

C. develop and implement remedial action to improve the effectiveness of the total program

JOB ANALYSIS FOR POSITION

OF

GENERAL MANAGER

A. DEVELOPS AND MAINTIANS A POSITIVE RELATIONSHIP WITH THE BOARD OF DIRECTORS

MEASURE OF SUCCESS: an informed board

GOAl: keep board informed of events critical to their job of managing the interests of the member-owners

ACTIVITIES: sends a complete agenda for meetings
makes reports in a timely fashion

B. DEVELOP AND MAINTAIN MEMBER SATISFACTION WITH THE COOPERATIVE'S SERVICES

MEASURE OF SUCCESS: member satisfaction

GOAL: maintain a low number, type and severity of member complaints

ACTIVITIES: provides for personal response to all complaints

verifies satisfaction with responses given

keeps directors informed of member complaints and the responses within their district

MEASURE OF SUCCESS: Public Service Commission complaints referred to coop

GOAL: Keep complaints to one per year

ACTIVITY: provides a prompt, thorough and documented response

C. DEVELOP AND MAINTAIN AN EFFECTIVE AND EFFICIENT WORKFORCE

MEASURE OF SUCCESS: Comparability of performance to that of other systems using the REA/CFC ratios

GOAl: keep costs within comparable levels or document the reasonable cause for the difference

ACTIVITIES: uses estimates of consulting engineer to determine comparable cost
sets workplan goals and budgets use of resources to achieve goal

MEASURE OF SUCCESS: results are within budget and meet goals

GOAL: all major construction projects are within the workplan budget and time schedules

ACTIVITIES: weekly review of all major projects to compare actual cots with projected
training of workcrews in better work procedures

D. DEVELOP AND EXECUTE A WORKPLAN WHICH ACHIEVES THE FINANCIAL GOALS OF THE COOPERATIVE

MEASURE OF SUCCESS: financial goals of cooperative

GOAL: all financial goals are met

ACTIVITIES: use daily, weekly, monthly and annual financial reports to monitor performance
reward the performance which help achieve the financial goals desired
analyze all variances and implement action plans to correct problems

E. DEVELOP AND MAINTAIN POSITIVE RELATIONS WITH THE MANY PUBLICS OF THE COOPERATIVE(lenders, regulators, media, community, etc)

MEASURE OF SUCCESS: REA/CFC critique of relations with the General Manager

GOAL: comments are favorable and positive

ACTIVITIES: monitor all REA/CFC communications with the cooperative to insure prompt, courteous and appropriate response
meet periodically with REA/CFC field and area office personnel to keep them informed of the cooperative's activities

F. DEVELOP AND PRESENT STRATEGIC PLANS TO THE BOARD OF DIRECTORS WHICH WILL KEEP THE COOPERATIVE IN VIABLE OPERATION TEN OR MORE YEARS IN THE FUTURE

MEASURE OF SUCCESS: conformance of results to the long term goals of the cooperative

GOAL: a high degree of congruity of results and goals exists on an annual basis

ACTIVITES: monitor the current forecasts of probabilities of the impact of exterals forces to see that the are properly reflected in the strategic plan
regularly review and updat the strategic plan to the extent required

G. PROVIDE CONTRIBUTION AND LEADERSHIP TO RELATED COOPERATIVES (HE, ISW, NRECA, FEDERATED, CFC, etc)

MEASURE OF SUCCESS: participation record in terms of involvement and leadership

GOAL: provide effective and consistent support to extent local conditions allow

ACTIVITIES: be selective in determining where you make the most effective contribution
exercise care in committment of time to activities which require long term committment
periodically review with the board for advice and counsel

H. PROVIDE CONTRIBUTION AND LEADERSHIP TO ECONOMIC AND COMMUNITY DEVELOPMENT AND BETTERMENT

MEASURE OF SUCCESS: participation record

GOAL: participation record indicates interest and an effective use of personal skills to help organizations in the community

ACTIVITIES: demonstrate an awareness of and involvement in the key economic activities in the area

H. PERSONAL INTEGRITY AND EMBODIMENT OF GOALS AND PHILOSOPHY OF THE RURAL ELECTRIC PROGRAM

MEASURE OF SUCCESS: personal intregrity and cooperative philosophy

GOAL: overall record of performance in carrying out duties and in interaction with directors, employees, members and the public demonstrates behavior which is marked by honest, straightforward dealings and a willingness to admit fault

ACTIVITIES: display a knowledge of and practice the philosophy and principles of cooperatives
teach others about the history, philosophy and principles of cooperatives
behave in a manner which brings high regard and merit to the cooperative

JOB ANALSIS FOR SYSTEM ENGINEER

CRITICAL TASKS FOR EFFECTIVE PERFORMANCE:

I. SPECIFY THE DESIGN OF THE ELECTRIC SYSTEM AND MATERIALS USED IN ITS CONSTRUCTION, OPERATION AND MAINTENANCE.

MEASURE OF SUCCESS: 1. system meets REA standards

BEHAVIORAL SCALE: 1. always.....usually.....seldom
5 4 3 2 1

ACTIVITIES: Regularly reviews all construction and maintenance work to assure compliance.

II. AUDIT THE PERFORMANCE OF THE ELECTRIC SYSTEM FOR COMPLIANCE WITH ALL APPLICABLE STANDARDS, REGULATIONS AND PRACTICES, AND SPECIFY CORRECTIVE ACTION WHERE NECESSARY.

MEASURE OF SUCCESS: 1. number of corrective actions.

BEHAVIORAL SCALE: 1. a bunch.....some.....out to lunch
5 4 3 2 1

ACTIVITIES: Directs monthly reading of protective equipment operations and various test devices.

III. SERVES AS CORPORATE RESOURCE FOR TECHNICAL DESIGN OF ELECTRICAL SYSTEM.

MEASURE OF SUCCESS: 1. is current on all REA specs.

BEHAVIORAL SCALE: 1. yes.....no.
5 4 3 2 1

ACTIVITIES: Regularly consults with Field Services and Operations management on construction design.

IV. DIRECTS RESEARCH AND MAKES RECOMMENDATION FOR CORPORATE STRATEGIES IN SYSTEM CONTROL, ENERGY MANAGEMENT, RATE DESIGN AND END USE ENERGY UTILIZATION.

MEASURE OF SUCCESS: 1. makes progress reports to GM.

BEHAVIORAL SCALE: 1. frequent....often....occassionally
5 4 3 2 1

ACTIVITIES: Analyszes monthly and annual data on system operation to determine trends and conditions.

V. PREPARE ANNUAL, TWO YEAR AND LONG RANGE ENGINEERING WORKPLANS AND BUDGETS.

MEASURE OF SUCCESS: 1. meets deadlines for preparation.

BEHAVIORAL SCALE: 1. always....most times....never in.
5 4 3 2 1

ACTIVITIES: Reviews system performance data with the REA OFR to determine needed construction.

VI. DIRECT SPECIAL CRITICAL CORPORATE PROJECTS, INCLUDING THOSE REQUIRING INTERDEPARTMENTAL COORDINATION.

MEASURE OF SUCCESS: 1.achieves cooperation of staff

BEHAVIORAL SCALE: 1. heaven.....purgatory.....????
5 4 3 2 1

ACTIVITIES: Prepare revision and updating to Corporate Emergency Contingency Plan annually.

VII. NEGOTIATES, STAKES AND PREPARES CONTRACTS FOR MULTI-PHASE AND URD SERVICE EXTENSIONS; CONSTRUCTION OF ELECTRIC SYSTEM IMPROVEMENTS AND PURCHASE OF SPECIAL EQUIPMENT.

MEASURE OF SUCCESS: 1. consumer satisfaction.

BEHAVIORAL SCALE: 1. no complaints...some....several.
5 4 3 2 1

ACTIVITIES: Reviews all requests for service involving subdivisions or multiphase distribution line extensions.

PREPAYMENT FOR ELECTRIC SERVICE THROUGH NEW METERING TECHNOLOGY

by Joseph W. Sloan, General Manager
Anoka Electric Cooperative
Anoka, MN 55303

ABSTRACT

The Consumer Information & Control Metering System (CIC) requires advance payment for the use of electricity. Its major elements include an indoor display box, a control box installed in the meter socket, and a conventional meter modified to initiate one digital pulse per disc revolution. An encoded mag-stripe card is purchased from the utility and passed through a card-reading slot on the display box. The amount of the purchase and the rate information is loaded into a microprocessor, which then monitors the electric use and provides the consumer with five displays, selected sequentially by pressing a button. The displays are all shown as dollar values and include the amount remaining, present use, amount used yesterday, amount used last month, and the value of the last purchase. Successive cards load additional purchases, and the cards may be thrown away after use. A password system protects against electronic fraud.

The purpose of the CIC metering system is to reduce the cost of electric power to the consumer through a lower electric rate, the elimination of special fees, and greater consumer awareness and control over consumption. A secondary value is the greater convenience offered, particularly by allowing electric purchases at any time and in any amount, and the elimination of deposits and other procedures now associated with a consumer moving in and out of a location. Testing and evaluation is now being conducted by two utilities with good results, and additional sites are being sought to expand the test program.

INTRODUCTION

The concept of pre-payment for electric service is an old idea that has found new life in a metering system which has been developed and is now undergoing field tests at the Anoka Electric Cooperative (AEC) in Anoka, MN. The system is called the Consumer Information & Control (CIC) Metering System because its indoor display box provides the consumer with real-time information on his electric usage and status that allows him to make on-the-spot decisions about using various appliances.

When a purchase of electricity is made, the transaction is encoded on a throw-away mag-stripe card. The consumer passes the card through a slot in the display box to add the new purchase to his remaining supply. If the supply is allowed to run out, service is automatically disconnected until a new supply is purchased.

AEC has determined that it is technologically possible to operate such a pre-payment system, but it has yet to be established that it is economically feasible or socially acceptable. Preliminary discussions with consumer interest groups, legislators, and regulatory commissioners have produced reactions that range from neutral to very supportive of the concept. Initial reactions from consumers where the meters have been installed have been very encouraging (See Attachment A). The National Rural Electric Cooperative Association (NRECA) has provided a major portion of the funding for the development of the system, and the Northern States Power Company (NSP) in Minneapolis has also provided funds and is evaluating the system.

REDUCED COST OF ELECTRICITY

The primary purpose of the CIC Metering System is to save money for the consumer. This reduction would be accomplished through (1) a lower basic rate, (2) the elimination of special charges and deposits, and (3) a greater consumer awareness and control over electric consumption.

CIC meters should ultimately be installed system-wide if the full potential in cutting utility costs and lowering electric rates is to be realized. System-wide use would allow the elimination of the regular meter reading and billing system, and this should reduce the customer-related costs (monthly fixed charge) by about $1.00 per month. This is possible because of the following projected savings in operating expenses:

1. 90% reduction in meter reading expenses
2. 100% reduction in the credit department expenses
3. 100% reduction in account transfer expenses
4. 50% reduction in consumer billing expenses
5. 100% reduction in bad debt losses.

In addition to the lower fixed charge for all consumers, many would gain considerable additional savings from the elimination of special service fees and charges associated with:

1. New account set-up
2. Deposits

3. Late payment of bills
4. Collection and disconnect trips.

For example, at the present time, 19% of AEC consumers pay the late-payment charge each month. On a typical $50 bill, this amounts to a 4.3% additional cost.

The CIC metering system is also expected to induce a certain amount of conservation with a large number of consumers. With the information provided by the CIC display box, the consumer can know at any time his present rate of use, and how much of his budgeted (purchased) electric supply remains. With this information, the consumer can make informed decisions on when and whether to reduce his use of electricity in order to save on costs. He can also learn very quickly which appliances use the most (and least) amounts of electricity. The level of conservation which is induced by such information may depend upon the consumer's financial condition.

A MORE RESPONSIBLE CONSUMER

The present method of buying electricity has been likened to going into a grocery store where no prices are shown, taking any food you wish home and eating it, and then several weeks later getting a bill for it. The CIC metering system changes this by providing a more rational approach for the consumer to use when buying electricity.

GREATER CONVENIENCE

With the CIC metrering system, there is no need to establish the identity or credit-worthiness of any consumer. Therefore, a number of traditional interactions between the utility and the consumer will be eliminated, including:

1. Sign-up for service when moving into a new location.
2. Final meter reading and billing upon moving away.
3. Unexpectedly high bills
4. Erroneous meter readings.
5. Erroneously estimated bills when readings are not available.
6. Delinquent notices when bills are not paid on time.
7. Visits from the bill colector.
8. Disconnection of service by the utility for non-payment of bills.

THE EQUIPMENT

The equipment is designed to mount in an existing meter socket. It uses a standard Class 200 Watthour meter which has been modified by the addition of two pair of photo cells mounted on the back of the meter name plate immediately below the rotating disc. The disc has been painted with a pattern such that the photo cells will generate one digital pulse per disc revolution. This is a common technique now used in other electronic metering applications.

Between the meter and the meter socket is a meter socket extension sleeve which contains a 160-amp ASCO 913 switch, a low-voltage power supply, and a small printed wiring board which provides some of the logic necessary to make the system function.

Inside the house is a 10.3 cm by 17.8 cm (4" by 7") display box, which may be located anywhere that it can be readily seen. This box is similar to a wall thermostat and includes a mag-stripe card reader, 7-digit display, push button to change displays, and a printed wiring board. The instructions for use are printed on the box, and include the statements:

"For new supply, buy card, pass through slot."
"When ordering electricity, always use this number (10 digit account no.)"

The "Select Display" button is labeled, and a list of the displays is shown, as follows:

"1 $ Remaining"
"2 Present Use - $/hr."
"3 Used Yesterday"
"4 Used Last Month"
"5 $ Last Purchase"

The display values are all expressed in dollars and cents.

In the present model, a small six-conductor cable is used to connect the indoor display box with the outside disconnect switch.

OPERATING PROCEDURE

After the equipment is installed at a new location, the meter is "initialized" with an encoded card that assigns the account number and password codes. Once initialized, these memory locations are electronically locked, and the meter will then accept only transaction cards which have been issued for that specific location, and only in the sequence issued. A card issued for one location will not work at another. This is necessary to prevent counterfeiting and to be able to audit the amount of electricity sold and used at a location in case of a dispute.

Transaction cards are encoded using a Mag-Tek MT-80 mag-stripe card writer, which is connected to a personal computer. After an account has been set up in the consumer file, a transaction requires only that the account number and the amount of the purchase be entered by the clerk. The card is passed by hand through a slot which writes the data on the magnetic stripe. This operation would be automated when the number of cards to be processed made it necessary.

The transaction cards may be purchased at the utility's offices or by mail. When a valid transaction card is passed by hand through the card reader slot in the display box, the box will emit an audible chirp, and the display will change to #5 to confirm the value of the card. If a card which has been read by the meter is passed through the slot a second time, the display will show an error code, "E--- 5," which indicates an invalid password. This results from the fact that the password changes at each transaction in a manner known only by the issuing computer and the receiving microprocessor.

Other error codes may appear when a card is passed through the slot. If the meter has not been initialized (assigned an account number and password code), "E--- 4" will appear. Errors 1, 2, and 3 relate to card reading errors

such as damaged or incomplete mag-stipe data, or moving the card too slowly, tilted, or erratically through the slot.

The value of each subsequent card which is loaded into the meter is added to the previous amount remaining. When a card is read and accepted by the meter, the display changes to #5 to show the value of the card, but by pressing the "Select Display" button one time, the display will change to #1 to show the new amount remaining. If any display other than #1 is left on, it will automatically revert back to #1 after a maximum of 15 minutes. If the button is pressed repeatedly, the display will cycle from #1 through #5, and then back to #1.

Display #2 shows the cost per hour for the appliances presently in use, and it changes as the appliances are turned on and off. Typically, with only lights, TV, and fans operating, display #2 will show the operating costs to be one or two cents per hour. The consumer will observe that an electric range, oven, air conditioner, clothes dryer, water heater, or other major appliance will substantially increase the rate of use shown on display #2. This information allows the consumer to make real-time decisions on whether or not to use certain appliances, based on (1) their rate of consumption, (2) the remaining supply of electricity in the meter, and (3) the ability of the consumer to make a timely additional purchase of electricity.

Display #3 changes once each 24 hours and shows the amount of electricity used for that 24-hour period. This change will not necessarily occur at midnight unless the meter is equipped with a calendar clock.

Display #4 changes once each 30 days and shows the amount of electricity used for that month. Again, this change will not necessarily occur at the end of each month unless a calendar clock is installed.

LOW SUPPLY WARNING

If the supply of electricity begins to get low, the display box provides a warning to the consumer with an hourly "chirping" and a continuously flashing display. These warnings will occur at any time the "Amount Remaining" is less than four times the value of the amount "Used Yesterday." The flashing display and the hourly chirping will continue until:

1. Additional electricity is purchased and loaded into the meter.
2. The daily use of electricity is reduced to the extent that the next daily calculation shows more than a 4-day supply remains because of the reduced consumption level. (The 4-day warning is arbitrary, and could be readily changed if field tests show it is needed).
3. All purchased supply is used up and the lights go off.

LIGHTS OUT

If the supply of electricity is allowed to run to zero, electric service will be automatically cut off until an additional purchase is made and loaded into the meter. The display will stay illuminated and show the #1 value to be ".00". If there is a power failure on the utility side of the meter, the display will go dark. This difference in display conditions will allow the

consumer and the utility dispatcher to determine if a power interruption is due to "running out" of electricity, or to a utility power outage.

The possibility of running out of electricity constitutes the major objection by many to the pre-paid system. While running out of electricity or such other energy sources as gasoline, heating oil, or LP gas can be very inconvenient, it generally is not catastrophic. Electric service is already subject to interruptions from a number of natural causes for extended periods, so critical service locations must already have back-up arrangements. Some worry about running out while they are away for an extended period of time. In those cases, special arrangements would need to be made just as they are now to make sure that service is not inadvertantly cut off.

AFTER-HOURS PURCHASES

If a consumer runs out of electricity at night, it is proposed that purchases be available through wall-mounted machines that would read and accept dollar bills of various denominations and dispense the mag-stripe cards. This would replace the present "night deposit" box at utility offices. These machines could also be installed at other locations where there is proper security and connection to the utility's computer could be provided.

NO MORE CREDIT

A second objection to the pre-paid metering system may be that the consumer no longer has an open line of credit available with the utility. However, such credit is not now available in regard to any of the other necessities purchased by consumers. For example, heating oil, LP gas, gasoline, food, rent, insurance premiums, basic phone service, and even postage stamps must all be paid for before they are used. Among all the necessary service, only the "connected utilities" have not changed their transactions to a pre-payment system, and that is because the technology to make it practical has not heretofore been available.

LOW INCOME FAMILIES

Where low income people may have difficulty in paying for their electric service, it is better for all concerned to identify these problems BEFORE the electricity is used instead of AFTERWARD, and to provide the consumer with the information and incentive to control and conserve its use. Where necessary, a basic quantity of electricity could be provided regularly to the indigent through existing energy assistance or other social programs.

RATE CHANGES

When the electric utility has a rate increase or decrease, this is reflected in the code written on the mag-stripe card. Each time a transaction card is passed through the slot in the display box, the rate is read and stored. If the current rate is different from the previous rate, all the unused supply in the meter is effectively repriced to the present rate. This makes it possible for a consumer to "stock up" on lower-priced energy just prior to a rate increase, however, any perceived advantage to the consumer will likely be offset by the interest earned by the utility company on the larger-than-normal advance payment. In the event of a rate decrease, the consumer

could buy a very small amount of electricity the day the rate becomes available, and use that transaction card to reprice the remaining amount of previously purchased electricity to the new, lower rate.

DIFFERENT RATE STRUCTURES

The microprocessor program has been written so that many different rate structures can be accomodated without any changes in the program. The rate structure in use at any time depends only upon the codes written on the mag-stripe card, and it can be changed at any regular transaction. Rates readily available include:

1. Fixed charge with a flat energy rate.
2. Fixed charge and three levels of declining blocks.
3. Fixed charge and three levels of inverted blocks.
4. Fixed charge and two levels of conservation credits.
5. Three levels of time-of-day rates.
6. Various demand considerations.

The fixed charges can be different for different accounts to accomodate security lights or other special services. Any taxes applicable to individual accounts are automatically taken into consideration when the transaction card is written.

TESTING PLANS

Two utilities are presently involved in testing the CIC system. Additional meters are to be built and installed at other utility sites in different states in the summer of 1986 as part of an expanded testing program. If these test are successful, large scale testing programs involving several thousand meters will be undertaken in 1987. Any utility company which would like to participate in the 1986 testing program should contact the Anoka Electric Cooperative by April 15, in order to be included in the second production run. A test package including 25 meters and all supporting hardware and services is available for about $18,000. Additional meters cost about $475. Exact pricing will depend upon the size of the production run. Reduced prices may be available to utilities which are full dues-paying members of EPRI.

CONCLUSION

While a number of innovations in metering equipment and meter reading procedures have been developed since the advent of the microprocessor, they have provided only marginal improvements in efficiency, and generally have not found wide-spread use because of their high initial cost. The CIC metering system, on the other hand, represents a veritable "quantum jump" in potential reduction of operating costs and improved efficiency. The design is "user friendly" and has a very high level of security against fraud. It has been very well received by volunteers in the initial field tests. Expanded testing is planned which will include non-volunteers in a less sympathetic environment. Concurrent with this testing of consumer reaction will be design refinements to minimize the cost of mass production and installation of the equipment.

Attachment A

CIC METER TEST PROJECT
Meeting of Participants
February 25, 1986

A meeting of all participants in the CIC meter test program was held shortly after all the meters were installed. All 21 participants were present, along with 9 spouses. They were asked, "Why did you decide to participate in the meter test program?" Following is a summary of all the reasons mentioned.

Innovative, fun, new, curious, interesting	11111 11111 1111
Cost Factor, reduction, save money	11111 1
Learn how to save money	11111
Awareness of Cost of Electricity	11111 11111
Interested in conservation	1

Curiosity seemed to be a major motivation. This is not entirely unexpected since the test group is made up of volunteers who responded to a mailing to 600 Co-op members in four randomly selected suburban meter routes. The demographic data (age, income, education) has not been requested yet, but ages appear to range from middle twenties to the seventies; income level appears to be from middle to lower-middle income, based upon their jobs and where they work.

If a conclusion can be drawn, it would be that the participants desire a greater understanding of their electric use so they can learn how to save money. The word "conservation" was mentioned only one time.

ADVANTAGES

The participants were asked to write down what they thought were the advantages of the CIC metering system. Following is a summary of their responses.

Awareness of use, instantaneous, constant	11111 11111 11111 11111 11111
More efficiency, wise use, cost effective	111
Conservation, alter habits, budget use, save, control use	11111 11111 11111 11
Replace inefficient appliances	1
Inside meter, convenient, no calculations	11111
Entire family aware of costs	111
Bills paid promptly, no dead beats	1111
Pay ahead of time, get money in advance	111

DISADVANTAGES

The participants were also asked to list the disadvantages of the CIC metering system. This question was asked at the beginning of the meeting, and also at the end. The most interesting result of this procedure was that at the beginning of the meeting, 14 people expressed concern over running out of electricity, but after the discussions, half of them apparently changed their minds and decided that this was not a problem. For example, one person first wrote, "Possibility of running out of electricity," but later wrote, "None with the (low supply) warning. I think it is great." Six people indicated that they saw no disadvantages.

Forgetting, running out of electricity (These changed minds after demo)	11111 11111 1111 ***** **
Running out when away	1111
No pay, no electricity	1
Meter malfunction	11
Box on wall in kitchen	1
Payment in advance, should save more than $1 per month	1111
Not enough payment to test participants	1
Inconvenience, having to pay more attention	111
Limited locations to purchase cards	1
None	11111 1

INFORMATION ON PRODUCTIVITY AND WORK EFFECTIVENESS WAS PRESENTED BY JOE SLOAN, USING THE ATTACHED AS A DATA BASE.

MATERIAL CHARGE TICKET

DATE 86/05/12 SCHED. BEGIN 05/09/86 LOCATION
NAME HIDDEN OAKS EAST 2ND ADDN G/L
DESC. POLE MOVE

TAX 023

TICKET NO. 109,924
JOB NO. 77120R
WHSE 1

ITEM DESCRIPTION	ITEM NUMBER	EXPECTED ISSUE	UNIT MEASURE	QUANTITY ISSUED	RETURNED	QUANTITY SALVAGE	SALVAGE
ANCHORS, 4W 10M	0120		EA			2	—
GUY ATTACHMENTS 5/8 IN BOLT	0365		EA			2	—
BOLTS, EYE 5/8 IN X 9 IN	0820		EA			2	2
BOLTS, MACHINE 5/8 IN X 9 IN	0924		EA			2	3
BOLTS, MACHINE 5/8 IN X 10 IN	0928		EA			4	4
CLAMP, 4/0 AL DEADEND FOR AL	1605		EA			2	—
CLAMP, GUY BONDING THIMBLE EYE	1731		EA			2	/
CLAMP, HOTLINE 8A TO 1/0 CW	1961		EA			1	/
FANN GRIPS FOR 3/8 IN GUY WIRE	2073		EA			4	
CLEVIS, RIGID 5/8 IN 3 IN BOLT SPOOL	2275		EA			2	2
GUY GUARDS, YELLOW 8 FT	3051		EA			2	
GUY STRANDS 3/8 IN	3156		EA			18	—
INSULATOR, SUSPENSION 6 I 12-19L	3323		EA			2	
INSULATOR, SPOOL 3 IN	3328		EA			2	2
POLES 30-6	4000		EA			1	—
POLES 40-4	4024		EA			1	—
RODS, ANCHOR 5/8 X 7 THIMBLE	4405		EA			2	
RODS, GROUND 3/4" X 8' GALVANIZED	4673		EA			1	—
WIRE, 2 TPX	6041		LB			14	—
WIRE 6, SD	6069		LB				—
WASHERS 2 1/4 IN 13/16 IN HOLE	6382		EA			8	8
GROUND CLAMP,STAINLESS STEEL FOR5/8"TO3/	8506		EA			1	—
	0220						/

24

MANPOWER : TOTAL HOURS = 8.00 CREW MEMBERS NEEDED = 2

WHSE OUT _____ DATE _____ CREW _____ PAGE 1 OF 1

DATE COMPLETED 5-14-86 SIGNATURE _____

B-P		OH New		OH Imp		OH Repl		UG New		UG Imp		UG Repl	TOTAL			Ratio
88	PATENAUDE	3710.21	5969.50	1966.95	4492.00	522.94	1413.50	3756.70	6619.00	697.75	512.50	35.00	96.50	10689.55	19103.00	1.79
188	LUND	565.68	1085.50	47.05	112.00	255.45	752.00	4178.15	6575.00	483.50	1044.50	18.00	55.00	5547.83	9624.00	1.73
288	LEHN	186.64	532.50	1134.00	2446.00	122.00	377.50	5296.65	9444.00	1437.10	1976.00	76.75	100.00	8253.14	14876.00	1.80
434	WATSON	429.18	721.00	981.99	1235.00	272.05	1019.00	750.96	947.00	120.90	191.00	537.00	1903.50	3092.08	6016.50	1.95
		4891.71	8308.50	4129.99	8285.00	1172.44	3562.00	13982.46	23585.00	2739.25	3724.00	666.75	2155.00	27582.60	49619.50	1.80
			1.70		2.01		3.04		1.69		1.36		3.23		1.80	

	OH New		OH Imp		OH Repl		UG New		UG Imp		UG Repl		TOTAL		Ratio
11 Ronallo															
Jan 86	73.55	281.50	29.05	40.50									102.60	322.00	3.14
Feb 1985	4.35	6.00											4.35	6.00	1.38
Mar 1985					1.25	4.00							1.25	4.00	3.20
Apr 1985	22.50	34.00	539.59	1234.00	0.50	2.00							562.59	1270.00	2.26
May 1985	89.87	153.00	87.20	197.50	6.25	24.50	11.00	12.00					194.32	387.00	1.99
Jun 1985	34.05	63.00	148.45	463.00	5.00	22.00	13.20	28.00					200.70	576.00	2.87
Jul 1985	136.10	255.00	328.85	834.50			11.75	24.00					476.70	1113.50	2.34
Aug 1985	130.30	224.50	17.60	74.00	6.75	26.00	16.00	20.00					170.65	344.50	2.02
Sep 1985	173.33	328.00	20.75	76.50	6.50	26.00	3.00	10.50					203.58	441.00	2.17
Oct 1985	130.05	310.00			28.00	137.00							158.05	447.00	2.83
Nov 1985	42.65	89.00	88.00	202.00									130.65	291.00	2.23
Dec 1985													0.00	0.00	
TOTAL	836.75	1744.00	1259.49	3122.00	54.25	241.50	54.95	94.50	0.00	0.00	0.00	0.00	2205.44	5202.00	
Ratio		2.08		2.48		4.45		1.72						2.36	
12 Steenerson															
Jan 86	79.40	126.00	59.20	110.00	13.75	44.50	2.25	5.00					154.60	285.50	1.85
Feb 1985	51.60	63.00	106.76	147.00									158.36	210.00	1.33
Mar 1985	76.40	151.00	14.30	43.00	19.00	46.00							109.70	240.00	2.19
Apr 1985	90.25	122.00	36.55	69.00	8.75	21.50							135.55	212.50	1.57
May 1985	206.90	234.50	9.00	12.00	9.80	35.00							225.70	281.50	1.25
Jun 1985	151.20	191.00	1.70	4.00	12.80	21.00							165.70	216.00	1.30
Jul 1985	182.15	179.50	19.95	26.00	2.80	10.00	10.45	11.00					215.35	226.50	1.05
Aug 1985	188.05	167.50	16.75	17.00	9.10	24.00							213.90	208.50	0.97
Sep 1985	128.10	144.00	17.65	18.00	13.75	37.50	1.00	4.00					160.50	203.50	1.27
Oct 1985	188.75	234.00	13.95	10.00	1.50	5.00	17.25	14.00					221.45	263.00	1.19
Nov 1985	188.86	193.00	5.75	11.00									194.61	204.00	1.05
Dec 1985	125.25	209.50	12.80	23.00	4.25	10.50							142.30	243.00	1.71
TOTAL	1656.91	2015.00	314.36	490.00	95.50	255.00	30.95	34.00	0.00	0.00	0.00	0.00	2097.72	2794.00	
Ratio		1.22		1.56		2.67		1.10						1.33	
13 LeRoy															
Jan 86	5.00	6.00					304.80	431.50					309.80	437.50	1.41
Feb 1985	3.75	9.00					101.50	220.50					105.25	229.50	2.18
Mar 1985							70.25	133.00					70.25	133.00	1.89
Apr 1985	4.00	14.00	25.85	39.00			207.00	280.00	1.00	24.00	5.00	28.00	242.85	385.00	1.59
May 1985							193.65	382.00					193.65	382.00	1.97
Jun 1985							276.00	485.00	484.50	316.50	25.00	52.00	785.50	853.50	1.09
Jul 1985	14.00	10.00					137.00	223.00					151.00	233.00	1.54
Aug 1985	6.90	8.50					101.40	89.50					108.30	98.00	0.90
Sep 1985	8.00	9.00					187.30	386.00	24.75	44.00			220.05	439.00	2.00
Oct 1985							449.10	766.50	67.25	58.00			516.35	824.50	1.60
Nov 1985							444.55	625.00					444.55	625.00	1.41
Dec 1985							168.50	395.50					168.50	395.50	2.35
TOTAL	41.65	56.50	25.85	39.00	0.00	0.00	2641.05	4417.50	577.50	442.50	30.00	80.00	3316.05	5035.50	
Ratio		1.36		1.51				1.67		0.77		2.67		1.52	

WORKLOAD SUMMARY

INITIATED	'86 Jan	1985 Feb	1985 Mar	1985 Apr	1985 May	1985 Jun	1985 Jul	1985 Aug	1985 Sep	1985 Oct	1985 Nov	1986 Dec	Total
OH New	183	196	163	395	388	521	440	561	405	475	502	267	4498
OH Improvement	264	81	83	246	70	79	117	34	268	117	74	283	1715
OH Replacement	130	42	43	75	82	88	54	83	105	65	224	170	1161
UG New	477	169	474	803	1061	1125	1503	1599	1560	1873	1322	416	12380
UG Improvement	67	478	1051	240	69	64	126	206	84	27	132	0	2545
UG Replacement	14	2	5	49	63	72	167	47	50	57	42	15	582
Total	1135	967	1819	1808	1733	1949	2407	2530	2472	2613	2296	1151	22880

COMPLETED	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
OH New	224	214	190	209	455	363	489	395	553	540	454	357	4444
OH Improvement	346	331	14	926	139	342	440	68	107	883	158	261	4015
OH Replacement	261	175	76	36	83	52	24	23	79	89	54	104	1055
UG New	606	174	194	835	1201	1108	1302	1610	1775	2330	2204	756	14093
UG Improvement	0	0	0	36	35	1673	48	73	272	122	138	2	2399
UG Replacement	14	2	5	45	51	97	170	40	42	108	36	63	672
Total	1450	897	480	2087	1963	3634	2474	2208	2827	4072	3043	1542	26678

OPEN WORK ORDERS	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
OH New	436	329	314	482	401	575	551	728	610	560	648	592
OH Improvement	2367	1880	2501	2504	2492	2272	2062	2114	2277	1672	2047	2070
OH Replacement	374	277	256	296	280	326	356	412	441	418	587	638
UG New	2013	1355	1943	2257	2276	3255	3904	3899	3715	3502	2662	2320
UG Improvement	1222	573	1634	2871	2950	1251	1380	1513	1326	1190	1184	1182
UG Replacement	22	24	24	28	53	28	25	32	40	22	70	22
Total	6433	4438	6671	8438	8452	7707	8276	8698	8408	7365	7199	6825

Total Manhours Required to Complete Open Work Orders

	Ratio	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
OH New	1.67	728	550	525	805	670	961	921	1215	1018	936	1083	988
OH Improvement	2.00	4733	3760	5002	5008	4984	4545	4123	4227	4553	3345	4093	4140
OH Replacement	3.09	1154	857	791	915	867	1007	1098	1274	1363	1291	1815	1973
UG New	1.71	3442	2316	3323	3860	3892	5567	6676	6668	6352	5989	4553	3968
UG Improvement	1.44	1760	825	2353	4134	4248	1801	1987	2179	1909	1714	1705	1702
UG Replacement	3.22	72	76	76	89	169	89	79	101	127	72	226	72
Total	1.82	11889	8385	12068	14810	14829	13969	14884	15666	15324	13346	13476	12842
Weeks of Backlog		12.86	9.07	13.05	16.02	16.04	15.11	16.10	16.94	16.57	14.44	14.58	13.89
	Year Ago	10.65	10.40	10.82	10.21	11.10	9.87	9.59	7.42	8.18	10.84	9.46	9.50

	OH New		OH Imp		OH Repl		UG New		UG Imp		UG Repl		TOTAL		
14 Palmer															
Jan 86	15.60	63.50			48.00	156.00	111.00	213.50					174.60	433.00	2.48
Feb 1985	66.55	131.00	7.90	17.50	52.00	128.50							126.45	277.00	2.19
Mar 1985	91.45	244.50			14.25	39.00							105.70	283.50	2.68
Apr 1985	79.85	110.50	61.10	121.50	13.10	31.00							154.05	263.00	1.71
May 1985	98.65	134.50	28.70	53.50	44.90	89.00							172.25	277.00	1.61
Jun 1985	123.90	186.50	35.25	77.50	19.00	61.00	35.50	52.00					213.65	377.00	1.76
Jul 1985	124.95	267.50	7.05	12.00			51.50	166.50					183.50	446.00	2.43
Aug 1985	2.40	7.50	10.55	33.00			220.25	357.00			1.00	4.50	234.20	402.00	1.72
Sep 1985	78.65	143.00			24.60	67.00	150.50	290.00	14.00	16.50	4.00	12.00	271.75	528.50	1.94
Oct 1985	40.05	110.50					192.15	395.50					232.20	506.00	2.18
Nov 1985	17.80	37.00	8.70	27.00			118.75	274.00	104.25	36.00			249.50	374.00	1.50
Dec 1985	19.35	52.00	173.85	450.00			112.75	244.50	2.00	17.50			307.95	764.00	2.48
TOTAL	759.20	1488.00	333.10	792.00	215.85	571.50	992.40	1993.00	120.25	70.00	5.00	16.50	2425.80	4931.00	
Ratio		1.96		2.38		2.65		2.01		0.58		3.30		2.03	
15															
Jan 86	8.25	24.00			30.50	60.00							38.75	84.00	2.17
Feb 1985	57.30	127.50	3.10	8.00	3.50	22.00							63.90	157.50	2.46
Mar 1985													0.00	0.00	
Apr 1985													0.00	0.00	
May 1985	20.00	23.00			4.84	11.00							24.84	34.00	1.37
Jun 1985													0.00	0.00	
Jul 1985	5.25	15.00			10.00	13.00							15.25	28.00	1.84
Aug 1985							13.75	28.50					13.75	28.50	2.07
Sep 1985	36.05	61.00	5.15	5.00			15.60	16.50					56.80	82.50	1.45
Oct 1985	113.55	117.00	11.40	17.00	5.00	13.00							129.95	147.00	1.13
Nov 1985	100.80	131.00	3.65	7.00	6.90	18.00	8.00	35.00					119.35	191.00	1.60
Dec 1985	74.50	167.50	10.85	12.00	96.60	208.50							181.95	388.00	2.13
TOTAL	415.70	666.00	34.15	49.00	157.34	345.50	37.35	80.00	0.00	0.00	0.00	0.00	644.54	1140.50	
Ratio		1.60		1.43		2.20		2.14						1.77	
PATENAUDE	3710.21	5969.50	1966.95	4492.00	522.94	1413.50	3756.70	6619.00	697.75	512.50	35.00	96.50	10689.55	19103.00	
Ratio		1.61		2.28		2.70		1.76		0.73		2.76		1.79	
11 Ronallo		2.08		2.48		4.45		1.72		0.00		0.00		2.36	
12 Steenerson		1.22		1.56		2.67		1.10		0.00		0.00		1.33	
13 LeRoy		1.36		1.51		0.00		1.67		0.77		2.67		1.52	
14 Palmer		1.96		2.38		2.65		2.01		0.58		3.30		2.03	
15		1.60		1.43		2.20		2.14		0.00		0.00		1.77	

RURAL ELECTRIC MANAGEMENT DEVELOPMENT COUNCIL

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"USE OF SMALL EMPLOYEE GROUPS AS A COMMUNICATIONS VEHICLE"

BY

David R. Schornack, Staff Assistant

Sioux Valley Empire Electric Association

Colman, South Dakota

Before I explain Sioux Valley's reasons for utilizing small employee group meetings, I will first give you a brief overview of our organization structure.

Background

Sioux Valley Electric is a full service electric cooperative comprised of four departments, namely, accounting, engineering, operations and member relations & marketing. The cooperative has 70 employees. Fifty-nine employees work in or out of the main headquarter facilities and 11 make up four area outpost crews.

The cooperative in past years has disseminated information to its employees by the means of a biweekly newsletter, department meetings and three to four employee meetings per year. A feeling had existed with the general manager and among some employees that communication between various organization levels and across departmental lines was not all that it should or could be. In order to fill the need for better communications Sioux Valley started in September of last year to use small employee groups as a communications vehicle.

What are Small Employee Groups - What Do They Do

The small employee groups consist of all regular and temporary employees from all departments and from all levels of the organization. Each group consists of approximately ten employees who were chosen at random. Each group, with the exception of one, has a member of the general staff as a member whose role is to assist the group in achieving its goals. The groups meet once a month to receive information and to provide the general manager with questions, comments and suggestions. Each group appoints a leader whose duties are to schedule a meeting of the group each month, take note of the suggestions, comments and questions that members of the group have directed to the general manager and to

give the general manager's response to the questions and comments at the group's next meeting.

To give you an idea of the makeup of the groups let me give you the names of the employees in one of the groups and their position titles.

Eng	-	Data Entry/Billing Clerk (group leader)
Conn	-	Heavy Equipment Operator
Fellows	-	Marketing Specialist
Hass	-	Accounting Manager
Johnson	-	Journeyman Lineman
Price	-	Electrical Advisor II
Whitehead	-	Purchasing Agent/Materials Coordinator
Kittelson	-	Cashier/Receptionist
Jastram	-	Journeyman Lineman
Fritz	-	Staff Engineer (general staff representative)

Also to give you an idea of the broad spectrum from which the group leaders have been chosen by the employees in their groups let me give you the names and the position titles of the group leaders:

Pifer	-	Manager of Member & Public Relations
Basart	-	Secretary, Member and Public Relations
Onken	-	Editor
Bortnem	-	Secretary, Member Relations & Marketing
Lund	-	Electrical Advisor I
Pietz	-	Secretary, Accounting

The groups are free to discuss whatever cooperative related subjects they desire and may also call in other cooperative employees to discuss various subjects and programs with the group. There have intentionally not been any rules or guidelines laid down as to how the meetings are to be conducted or what subjects can be discussed in order to give the employees as much latitude as possible to

discuss subjects which are of importance to them and to air their questions and concerns.

How Do They Work

The groups meet once a month for about two hours, at which time the group leader makes note of questions, comments and suggestions that the employees have.

After all of the small employee groups have met, the group leaders meet and consolidate their questions, comments and suggestions to the general manager. At times the group leaders, when meeting as a group, will derive a question on their own for the general manager to respond to in order to completely clarify a situation. The list of questions, comments and suggestions are then given to the general manager who after reviewing the list meets with the group leaders with his response.

The secretary for the group leaders takes note of the general manager's response and writes up the response for distribution to each group leader. The group leaders then meet with their group and review the general manager's response with them. By consolidating the questions the employees submitting questions can remain anonymous in relation to the general manager and also the employees can listen to the general manager's response to questions raised by other groups which gives them an even a broader knowledge.

An example of the questions that are asked by the employees and the general manager's response is as follows:

> Employee's question:
>
> How can inventory in the quonset be improved? Items the crews need are not there when they need them. Still think someone should walk through and check bins, etc. to make sure supplies are kept up. Lack of inventory affects every person's job who must work with it.

General Manager's response:

Barb's plan of action as the newly appointed Purchasing Agent/Materials Coordinator is to develop, by whatever means it takes, a minimum and maximum quantity of every item stocked in the warehouse. Someone will be devoting full-time to this. Condition will be monitored.

At the end of this year, we plan on switching the employees in the groups. This would give each employee the opportunity to experience even a broader exchange of ideas. This also would break up any cliques that might have developed within the groups. This has been mentioned to the group leaders and the reactions that I have received have been mixed. Some of the employees that have given me their reaction to doing this have stated that they were looking forward to switching, but the majority of the reactions I have heard is that they do not want to switch because "they have a good group" or that they "feel comfortable with their group." I personally feel that it is a good idea to switch the employees in the groups every year or so, this not only breaks up cliques that have developed, but it also gives the employees the opportunity to communicate with and learn more about other employees and their jobs.

Typical Discussion Items

Some of the questions and concerns that the employees have brought up at these meetings are:

- Why did we go to a new billing system?
- Why are we promoting electric water heaters with rebates?
- What is our weatherization program?
- Will another accounts representative be hired?
- What is our high bill procedure?
- When will the field reporting committee be reactivated?
- Do we still have the 5% loan program?

Additional Utilization of the Small Employee Groups

The small employee groups have also been used to:

- Explain and review the wage and salary plan
- Explain and discuss our marketing program-this includes in-depth discussions of the five major areas of the marketing program which are:
  - Dual Fuel Program
  - Load Limiter Program
  - Water Heater Rebate Program
  - Electric Water Heater Load Management Program
  - 5% Loan Program
- Solicit ideas for safety meetings
- Explain the new billing procedure

Probably the most major issue that the small employee groups have been used for is the obtaining of employee comments and suggestions on the wage and salary objectives. In light of the adverse economic conditions that prevail in the territory served by Sioux Valley, the Board had been struggling with whether or not our wage and salary objectives should be revised. The Board had asked the general manager to solicit comments from the employees concerning the wage and salary objectives.

The wage and salary objectives were reviewed with each small employee group. Also each group was informed that the Board was reviewing the wage and salary objectives and that the general manager would be soliciting comments from the employees concerning those objectives. A questionnaire had been developed and was distributed to each employee asking for their response to questions on how they felt about the current wage and salary plan. The response that was received from the employees indicated to a very large extent the employees were very satisfied with the current plan and believed it still to be a realistic basis for setting wages and salaries at Sioux Valley.

A recap of this survey information, along with some recent survey data on wages from other cooperatives in South Dakota, was then taken to the Board. After the general manager had reviewed the employee survey and the wage survey with the Board, the Board reaffirmed the wage and salary objectives and readopted its long standing target position in the labor market. It is my opinion, that the use of the small employee groups to explain the wage and salary objectives and to solicit their comments was a significant factor in the Board's decision to reaffirm the wage and salary objectives.

Reactions

Some reactions of the group leaders were:

- Serves an excellent purpose
- I have an excellent group
- My group does not want to split-up
- Groups should be divided differently
- Most questions are fully answered, if they are not the question is restated and presented again.
- Very worthwhile

Some reactions from department heads were:

- Good upward communication
- I think that the use of these groups is good. Employees have been asked for their comments and suggestions to topics they never thought they would be asked about.
- At times management has a tendency to become isolated. Using this communication vehicle aids in opening, and maintaining the communication process between management and employees.

Some general employee reactions were:

- Beneficial to the co-op and to the employee
- The employees have the opportunity to bring things up that they would not bring up otherwise

- Feel comfortable communicating with the people in my group
- Some group members are reluctant to discuss issues because of possible retaliatory actions of their supervisors
- Some employees are probably a bit too candid
- Excellent concept
- Some employees are reluctant to take part in discussions with department heads present
- Enhances good communication - up, down and across the organization

General Staff and Employee Attendance at Board Meetings

In addition to the use of the small employee groups Sioux Valley has involved members of the general staff in board meetings. All members of the general staff attend each monthly board meeting and have been used by the general manager to make presentations and are available for comments when called upon by the general manager. After the board meeting staff members may be called upon by the general manager for their reactions to the board meeting. I know, as a staff member, that being present during the board meetings gives me, as well as the other department heads, a broader and more complete view of the issues at hand, in-order to more effectively carry out my duties as a member of the general manager's staff.

Each month we also invite four employees at random to attend the board meeting. At the beginning of the board meeting the employees are informed that they will be asked for their comments and reactions to the board meeting at its conclusion. This again has proven to be an excellent exercise. The employees are made aware of what goes into the making of decisions at the board level and how elements outside of the immediate cooperative affect the cooperative, such as decisions at the G & T level, statewide and state and national legislative matters. This also gives the employees the attitude that the board and management

do look upon them as a very valuable asset and a very integral part of the organization. At the same time the board members have the opportunity to meet the employees. This exercise I believe, has worked extremely well at Sioux Valley. The directors have been eager to welcome the employees to the meeting and even those employees who had expressed a slight reluctance to attend a board meeting expressed appreciation for being asked to attend and stated that it was very worthwhile and a very rewarding experience.

Conclusion

The use of small employee groups as a communications vehicle has proven to be an extremely effective communications technique. It gives employees the opportunity to discuss their concerns, to receive answers to their questions, and to exchange ideas with other group members. It also provides the general manager with a better understanding of the employees concerns. There still exists a certain amount of reluctance among some employees to take an active part in the group as they are concerned as to how their supervisor may react. This feeling was somewhat counteracted when the general manager assured all employees that he would do his best to preserve the anonymity of comments and that if he was made aware of any retribution that he would take immediate action to correct the situation.

The use of small employee groups has proven to be a very effective communications vehicle at Sioux Valley. It has helped to open and maintain communications, not only between management and employees, but also among all employees at all organization levels and in all departments. The use of these groups has given the employees, not only the vehicle to express their concerns, comments, suggestions and to exchange ideas and to receive information, but at the same time gives management feedback from its most valuable resource - its employees.

BI-DIRECTIONAL SATELLITE COMMUNICATIONS

By Gary J. Hobson

- INTRODUCTION -

One of the fastest growing technologies of our time is satellite communications. Many think it's just entertainment, allowing enjoyment of many TV programs. It is actually much more. Satellite communications involves educational opportunities, informational access, data transmissions and many other services not even thought of which will make our lives better and our business more efficient. This technology has been around for years but with the divestiture of AT&T and the Bell Systems its growth has been accelerated to a point beyond belief. The divestiture has resulted in decreased reliability in leased line services at a time when costs for that service are rising dramatically. This has caused an even growing number of AT&T users to seek economic alternatives to their existing communications.

Existing alternatives, other than bi-directional satellite communications, include hardware systems, microwave systems, fiber optic systems and coaxial cable communication systems. Because of the costs associated with these alternatives, their use appears to be cost prohibitive. Use of alternate common carriers for AT&T alternatives, such as MCI or GTE, would still require leased line technology. In addition, these alternate common carriers utilize AT&T circuits in the more rural locations, so that no real advantage would be realized by a change in the supplier of leased line service.

The one alternative technology which can provide reliable communications along with economic potential is bi-directional satellite communications. This communications medium is not dependent on member location, but is dependent on the number of locations. Satellite communications technology for bi-directional transmissions has evolved to the point where remote terminals can be utilized with small antennas of approximately four feet in diameter and power output of one watt.

This new technology is creating tremendous excitement within various industries due to its potential capabilities. Corporations such as Federal Express, Exxon, Halliburton, Schlumberger and Southland Corporation have all entered the bi-directional satellite arena to further enhance their operations.

New technology and struggles to access new technology are nothing new to Rural America. Our great program was founded on the principal of providing a service generally not available to Rural America. We now find ourselves trying to find more efficient ways to continue providing electric service to our members. Communication is an important ingredient in this search, and bi-directional satellite communications appear to be the new frontier. Many leaders in our program have recognized the possible benefit bi-directional satellite communications could be to our program. From this grass roots recognition, organizations like NRECA, CFC and Central Area Data Processing (CADP) established committees to study the potential of this technology for the Rural Electric Program.

CADP began a detailed analysis on the cost/performance of satellite communication back in 1983. In 1984, a subcommittee of the NRECA Management Advisory Committee was appointed to look into this technology on a national basis. This subcommittee commissioned a study to determine potential and feasibility of telecommunications for Rural America. The study was conducted by Southern Engineering of Atlanta, Georgia. This study was the basis of a broad based, integrated system of communications between rural electric organizations at all levels; and possibly between the rural electrics and a national TVRO audience. The study found potential for rural electric systems in three satellite technologies: bi-directional voice/data transmission; bi-directional voice/data/video transmission; and one way video broadcasting.

Following the national study, NRECA and CFC established a National Rural Telecommunications Council. The Council's objective is to develop a national program to implement the recommendations contained in the NRECA/CFC telecommunications study. The Council consists of three subcommittees and a task force assigned to research ways of using bi-directional satellite communications to provide services to the rural electrics and encourage establishment of pilot projects. I have been asked to chair this task force and the activities of the task force are included later in this report. Also following the study, CADP retained Southern Engineering to concentrate its efforts on bi-directional technology and assist CADP in preparing a specific feasibility study in this area. Results of the study revealed economic and technical feasibility for CADP to develop its own bi-directional satellite data network. CADP continues to work with the Council and will serve as a pilot project for many of the rural electric applications identified by the task force.

I see the implementation of a bi-directional satellite network for Rural America as the most promising activity to increase efficiency for rural electrics in more than 20 years. I also believe it will provide an activity which will unite our rural electric organizations like we've never seen before. Communications is a key to the success of any organization, and rural electrics united together in a network that provides reliable, efficient, cost effective communications will promote the continued success of our great program.

- HISTORY -

Since the beginning of time, man has been trying to find ways to communicate. Early efforts evolved drums, smoke signals, cave drawings, telegraph, and so on. Twenty years ago, most of us would have thought that all ways to communicate had been thought of. Not so! As early as 1945, a British mathematician, Arthur Clarke, theorized that satellites placed in orbit could provide communications throughout the entire world. Clarke's theory didn't receive much attention until 1957 when Russia launched Sputnik. The radio signal transmitted by Sputnik sparked the beginning of a technological revolution that is still being felt today. In fact, the impact is probably greater today than even before with almost limitless future possibilities.

One of the byproducts of America's effort to regain space exploration supremacy has been technological communication breakthrough. As early as 1962, NASA launched the first satellite used for television programming. Satellites have been used for transmitting television signals since then, with increasing use each year.

In 1965, the first geostationary (an orbit at a precise distance from the earth, when the pull from the earth's gravity and from the centrifugal forces exerted from the orbit are equal) satellite was launched by the International Telecommunications Satellite Organization (INTELSAT). INTELSAT had been formed the year before to advance the development of satellite communications on a worldwide basis. Their satellites began to replace terrestrial lines between North America and Europe for television, voice, telex and facsimile requirements. INTELSAT now has over 10 satellites in space serving 108 countries. They are truly one of the most successful international businesses handling two-thirds of the overseas calls and most of the transoceanic television traffic.

The expansion and use of satellite technology has continued for over 20 years and will continue to expand for some time. Today, there are over 15 U.S. and Canadian Ku-Band satellites in geostationary orbit.
(See Exhibit 1.)

- HOW IT WORKS -

The operation of the satellite communications systems is based on the repeater approach of communications. These satellites operate on high frequency radio waves for transmission from the earth's surface to the satellite which is 22,300 miles from the earth's surface in geostationary orbit. This signal is then received by the satellite and retransmitted to the earth's surface at a slightly different frequency. (See Exhibit 2.)

Satellites operate using directional antennas. The direction of the transmitted signal is critical, and the antenna must stay oriented in one particular direction. Proper orientation is critical because the small satellite power output is spread over the North American continent to be received by earth stations. The signal pattern generated by these directional antennas is called a "footprint." The signal strength for any given area of the coverage pattern for a satellite will vary depending upon the distance from the center of the footprint. (See Exhibit 3.) The weaker the transmission from a satellite, the poorer the quality of reception for a given receiver antenna size. One way to counter this poor reception resulting from weaker satellite transmissions is a larger antenna at the receiving site.

The master station controller is the central hub for the system. This controller includes computer controlled information transmission, reception and routing for all data streams. Since this site is considered the "brains" of the operation, all critical components will include redundancy to enhance reliability and continued operation. The antenna for this site will be approximately 20 feet. The large size is required due to the various functions being performed by the equipment. (See Exhibit 4.)

Satellites are powered by photovoltaic cells which convert solar energy into electricity and store this energy in batteries. To maximize the power available from the sun, the satellites use outboard solar panels which rotate to collect the most power possible. The satellites have batteries on board which store power and provide operation during the two solar eclipses they experience each year. Even in geostationary orbit, some forces are exerted upon the satellite. These satellites have no resistance to movement, and therefore small propulsion rockets are attached for orbital correction and orientation. These rockets are powered only by fuel contained in the unit at the time of launch. All of these factors cause the useful life of a satellite to be rather limited and only replaceable with a new satellite.

Satellites are totally self-sufficient and inaccessible for repairs or adjustment. The net result is a very high standard for the manufacture of these devices and a corresponding high cost. For a satellite placed in orbit, the production cost of the satellite is typically $50,000,000. In addition, the cost to launch the same satellite is approximately $40,000,000. This total cost of $90,000,000 places 24 transponders in operation for a life expectancy of seven to ten years.

For satellite communications, two frequency bands, the C-Band and the Ku-Band, are available. There is a predominance of video entertainment in the C-Band, home satellite receiving systems for TV entertainment called TVRO systems. For bi-directional data, voice and video transmission, the Ku-Band has many advantages which provide technical feasibility for these type systems. The C-Band, due to severe limitations, cannot be used for bi-directional voice or video, but is capable of accommodating limited bi-directional data-only systems. Both the C-Band and the Ku-Band provide reliable communications and are well-suited for satellite communications. The C-Band is in greater use today, primarily because of the way it was started many years ago. When the use of satellite systems first became a likelihood, the radio equipment did not exist in commercial form to allow transmission in the frequencies above eight gigahertz. The only combination of equipment and frequencies available was in the C-Band which was already allocated by the FCC for use in terrestrial microwave common carrier communications. As is the case when more than one group desires to use a given frequency, the FCC instructed the new applicant to secure consent from the existing user for sharing of the frequency. The result was an agreement, still in effect, which limits the power output of the satellite transmitters to approximately ten watts so that interference with microwave stations on earth will be minimal. During the initial phases of implementation of these satellite systems, a great deal of investment was made in equipment which would only operate in the C-Band. There is now equipment available which will operate in the higher frequency Ku-Band, but there are no real advantages to changing to this higher frequency for the users who are already on the C-Band.

The Ku-Band is rapidly expanding due to equipment availability and the likelihood of lower costs of equipment in that band. One distinct advantage of the Ku-Band is the use of smaller dishes in the higher frequencies. At the present time, the Ku-Band is used primarily for telephone and data communications rather than satellite TV.

- ADVANTAGES OF SATELLITE COMMUNICATIONS -

Bi-directional satellite communication systems offer many advantages over costly and unreliable leased line circuits. Advantages include: cost savings, flexibility, high transmission rates, control, reliability, accuracy, and tremendous expansion capabilities.

Some companies are already reporting savings as high as 30 to 50% for satellite delivered data networks. Volume is an important factor in these cost savings. A certain volume level must be required before economic feasibility can be obtained. However, once a feasibility level is reached, additional volume has the effect of reducing overall costs. Another cost advantage is the benefit of fixing costs of equipment and transponder space for long periods of time. No more rate increase surprises from leased line vendors. Citibank reports that they have held telecommunication expenditures steady for almost three years while usage has increased, simply by investing in a satellite network.

Another big advantage to bi-directional satellite networks is the control, speed, and flexibility given to its owner/operator. Since the divestiture of AT&T, we have seen not only increasing costs but degradating service, less responsiveness and long installation times. No matter how large a customer you are of AT&T, or how much you complain, their response is always the same - "slow and uncaring." With a private satellite network, the owner has operational control which allows the system to be more flexible and responsive to its users.

Reliability and accuracy are other advantages which must be pointed out. The industry reports a 99% reliability factor which is much higher than traditional terrestrial networks. Some terrestrial line networks have been known to be operating "normally" with a reliability factor of 75 to 80%. Bit error rates on satellite networks are reported to range from 10^{-5} to 10^{-10} which at the high end might be considered "error free."

From a technical standpoint, the satellite-based network will provide extremely reliable communications when compared to leased telephone circuits. Two phenomena unique to satellite-based communications, however, will be a factor in this communications medium.

One phenomenon is known as "rain fade." Since Ku-Band systems operate at such high frequencies, heavy rain will tend to attenuate transmitted signals. The extent of the attenuated signal will be dependent on the rain density; however, this phenomenon will be of short duration and very localized. To offset this characteristic and to increase reliability, larger antennas could be used.

The other phenomenon is known as "sun outage." This outage is caused by the sun aligning exactly behind the satellite in a line with the receiving antenna. The sun emits white noise (noise of all frequencies). Since each antenna has a very narrow beamwidth, this phenomenon will only

occur twice yearly during the vernal equinox. This outage is highly predictable within several seconds, and can be accommodated well in advance of occurrence. During these two periods, the outage will last several minutes for each of three or four consecutive days. This will occur for any type of satellite-based system and affects all systems similarly. Even considering these two phenomena, satellite systems still will provide reliability in excess of 99%.

The final advantage I will mention here goes hand in hand with cost and control. This is the tremendous expansion capabilities of a satellite communications system. I have already mentioned that future growth will actually have the effect of reducing overall costs. Likewise future growth is more likely to happen if we have control of our own network and can plan this growth for the benefit of all users. The owner/operator is not at the mercy of AT&T or any other leased line company.

Four years ago there were virtually no companies in the satellite data market at Ku-Band. Today some people estimate as many as 30 companies are vying for corporate contracts for small aperture, bi-directional networks for data distribution. Estimates on the size of the satellite data market range from $1 billion to $3 billion in earth station sales alone by 1990. Telecon General's Gloria Dowden has stated that "we have never seen an industry develop so rapidly and have such viable and credible cost savings as a result of the technology."

- APPLICATIONS FOR RURAL ELECTRICS -

The key questions to all of us here today is how can bi-directional satellite communications be used in the Rural Electric Program? What are the advantages and applications for our type of business? Is it technically and economically feasible for Rural Electrics? What has been done to answer these questions?

First of all let me say in general, that all the advantages I have mentioned earlier in this paper can apply to Rural Electrics. Economic feasibility is there, especially if we all work together to support and encourage a cooperative type organization to bring all our efforts together. Remember the larger the satellite network, the better the economic feasibility. Also available to the Rural Electric Program are the advantages of flexibility, control, reliability, accuracy and expandability. So what are the applications for Rural Electrics?

To answer these questions, the NRECA/CFC National Rural Telecommunications Council established a task force to specifically look into this area. I was asked to chair the task force which was assigned the job of researching ways of using bi-directional satellite communications to provide communication services to the Rural Electric Program and to provide for the establishment of pilot projects. We were also asked to:

Survey possible uses of bi-directional satellite communications by rural electrics and associated organizations.

Determine present and future communication requirements of rural electrics and associated organizations.

Investigate available satellite technology and recommend most feasible approach to each rural electric application.

Develop economic feasibility of using bi-directional satellites instead of standard communication methods.

Determine compatibility of satellite systems to other communication systems.

Develop implementation plan.

Develop long-range plan.

Members of the task force include John McBride, Guernsey-Muskingum Electric Cooperative; Charlie Jack, Buckeye Power Cooperative; Norman Hoge, Cornhusker Public Power District; John Ferguson, Indiana Statewide; Jim Boatman, CFC; Morgan Dubrow, NRECA; Don Wood, United Utility Supply and Gene Chiodo, National Telephone Cooperative Association representative.

The task force has made steady progress toward its objectives. We will be submitting a report to the council in April dealing primarily with potential Rural Electric applications. The report will be divided into three application categories: Data, Voice and Video. At this point we have identified the following applications:

DATA -
- Computer to computer
- Energy Management Systems
- Supervisory Control and Data Acquisition
- Load Research
- Remote Meter Reading
- Distribution System Automation
  - System Control
  - System Monitoring
  - Switching
- Rural Electric Bulletin Board
- Electronic Mail
- Facsimile
- Financial Transaction Systems
  - Cash Management Functions
  - Financial Report Submission
  - Financial Information
- Credit History Data Base
- Material Supplies Ordering & Information
- Insurance Claim Transactions

VOICE -
- Private network between rural electric distribution systems and their associated organizations.

VIDEO -
- Broadcast Only
- Bi-Directional
- One Way with Voice Return
- Slow-Scan Video

There will be more applications added as the task force gathers the information. We also will take each of the applications and attempt to ascertain the following specific information about each one:

DATA -
1. What are the application advantages?
2. What are the application disadvantages?
3. Identify send-receiver pairs involved with data exchange.
4. Describe messages exchanged via the network.
   a. What is the purpose/use of each message type?
   b. What are the size(s) of each message type?
   c. What is the direction of data flow?
   d. What is the relative priority of each message type?
   e. What are the response time constraints, if any?
   f. For each message type, indicate if inquiry/response?
   g. For each message type, what percentage of total does it represent?

5. Characterize the application traffic patterns.
   a. What are daily, hourly, quarter-hour, minute traffic requirements?
   b. Under what conditions, if any, will traffic patterns change?
   c. What time zone interactions exist?
6. Best long term (2-10 years) application predictions.
   a. Will there be an increase/decrease in traffic?
   b. What requirements for new applications do/will exist?
   c. Will response time constraints become more stringent?
7. What are the potential protocol requirements for the DP equipment?
   a. Ascertain protocol is conducive to satellite communication procedures.
   b. Determine any variations from standard protocol definitions.

VOICE -

1. What are the application advantages?
2. What are the application disadvantags?
3. Identify access requirements (who needs access to the application?).
4. Profile conversations that would typically go over the network?
   a. Length of calls
   b. Priority of call - Acceptability of delay prior to call establishment.
5. Characterize the voice application traffic patterns.
   a. Average traffic requirements.
   b. Peak period traffic requirements.
6. Best long term (2-10 years) application predictions.
   a. Will voice traffic increase/decrease and by what amount?
   b. Will usage patterns change?

VIDEO -

1. What are the application advantages?
2. What are the applicaton disadvantages?
3. Identify users of application.
   a. What are individual needs?
   b. Identify conflicts in periods of usage?
4. Identify types of video requirements?
   a. Broadcast only (one way).
   b. Bi-directional.
   c. One-way with voice return.
   d. Slow-scan video.
   e. Video tape dissemination.
5. Identify quality requirements.

Once all the information is gathered, consideration will be given not only to which applications are more feasible today, but how they can be implemented in a pilot project. Central Area Data Processing is very close to making a decision to implement a satellite data network which could also serve as a pilot project for other applications.

- CENTRAL AREA DATA PROCESSING PROJECT -

To date, all of Central Area's service to its on-line member systems has been handled by AT&T dedicated telephone lines. This was an acceptable method of communication for some period of time even though there were many problems. However, problems after the divestiture of AT&T made past problems look good.

The breakup of AT&T and the Bell Systems has caused many companies to consider alternatives to AT&T leased line networks. AT&T service has declined, installation and repairs are very slow, and prices are going up. These problems are making it very difficult for Central Area and many other companies to meet the communications needs of end users at a reasonable price. Central Area's objective has always been to provide cost effective services to its membership along with providing future new developments such as load control, energy management, office automation, electronic mail, etc. These new technologies require speed, reliability and flexibility which we are not experiencing with our current AT&T network.

Under the direction of Central Area's Board of Directors, a detailed analysis of the cost/performance of satellite communications versus the present leased line methods was approved over two years ago. A tremendous amount of research and study has gone into this effort. During this time, Central Area participated in the NRECA/CFC Telecommunications Study followed by our own study completed by Southern Engineering of Atlanta, Georgia. Both studies showed technical feasibility, and Central Area's study also indicated economic feasibility.

Central Area presently has 32 dedicated leased lines serving approximately 700 data terminals at 130 rural electric systems in 27 states. Central Area communicates via data or voice to over 400 rural electrics and associated organizations during the year. The Central Area on-line network transmits almost 2 billion characters per month with a peak hour of over 20 million characters. The network has been growing at the rate of 30% per year for the past four years.

Central Area and its members are paying over $750,000 per year for dedicated lines. We have no control over cost, repairs, installations, reliability, accuracy or network transmission rates.

Satellite communications is a proven technology and definitely an answer to the problem ridden leased line networks. We believe it is the communications technology of today and the future for rural electric systems. By using a satellite communications network, costs will be more stable and predictable, reliability will be improved, and system flexibility will be added.

As a cooperative, Central Area is committed to providing automated services to the rural electric program. We are making every effort possible, both independently and working with organizations such as NRECA, CFC, Statewides, G&T's and other associated organizations, to see that present and future operational needs of rural electric distribution systems are met. A satellite communications network for Rural America could be the key to this, as well as the key to keeping our great program unified.

- CONCLUSION -

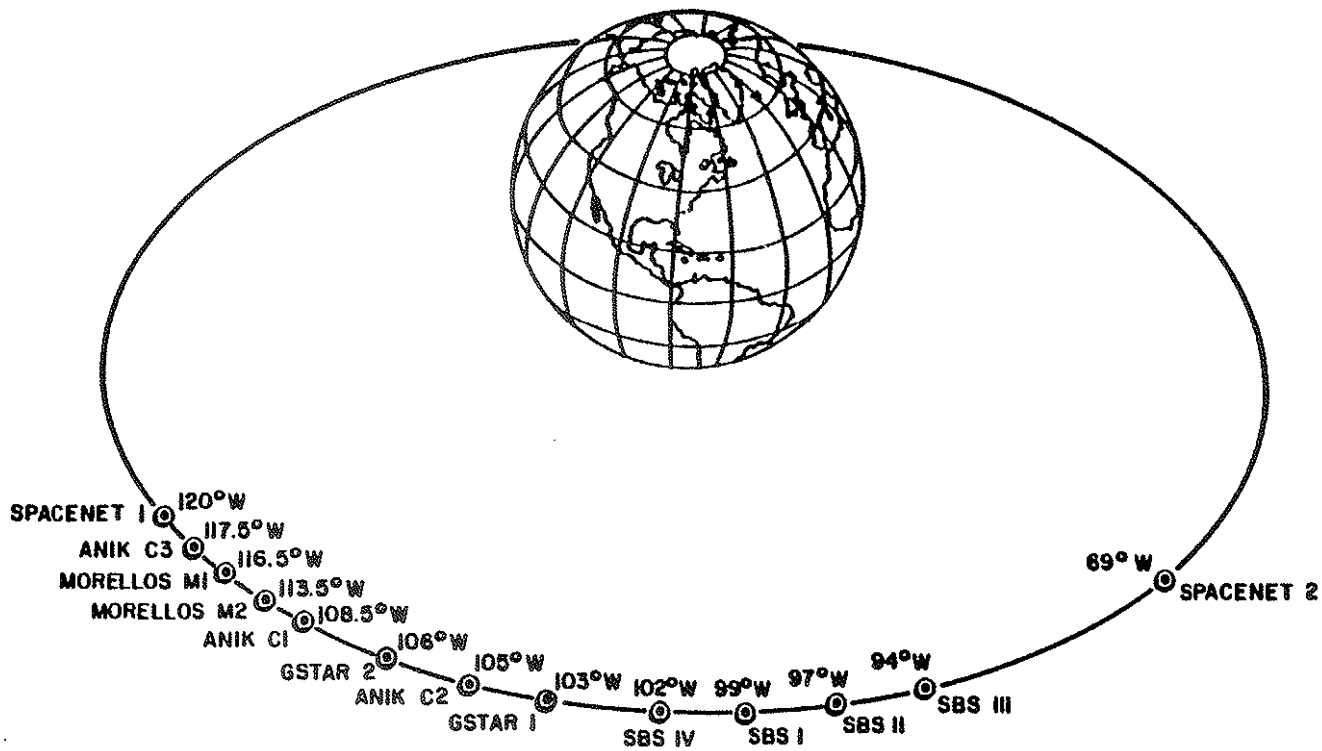
In conclusion, I would like to thank NRECA, CFC and many of you for encouraging me and CADP to continue our efforts in bi-directional satellite communications. I honestly feel this is a technology which has the potential of not only improving efficiency in the Rural Electic Program, but most importantly, it will have a significant uniting effect on our entire program.

I have attempted in this presntation to give you a brief "history" of satellite technology and "how it works." We have discussed the many advantages of this technology and the various potential applications for rural electrics. We are now at a point where the implementation of a live bi-directional network is in order. CADP appears to be the most likely candidate for this first application. If all continues to go well, CADP could have initial satellite data communications available to some of its members by year-end.

One thing I haven't mentioned in my presentation is the amount of interest shown by rural electrics across the country in response to the NRECA/CFC Telecommunications Study. The positive response to bi-directional satellite communications is very encouraging. Approximately 60% of the respondents to the survey said that if available, they would use electronic mail and facsimile transmission services offered by a bi-directional network. Over 83% of those responding indicated they used telephone lines to communicate with a computer (50% of these were using an outside data processing service). The greatest response area was for electronic funds transfer. Seventy-two percent said that their cooperative would use this service.

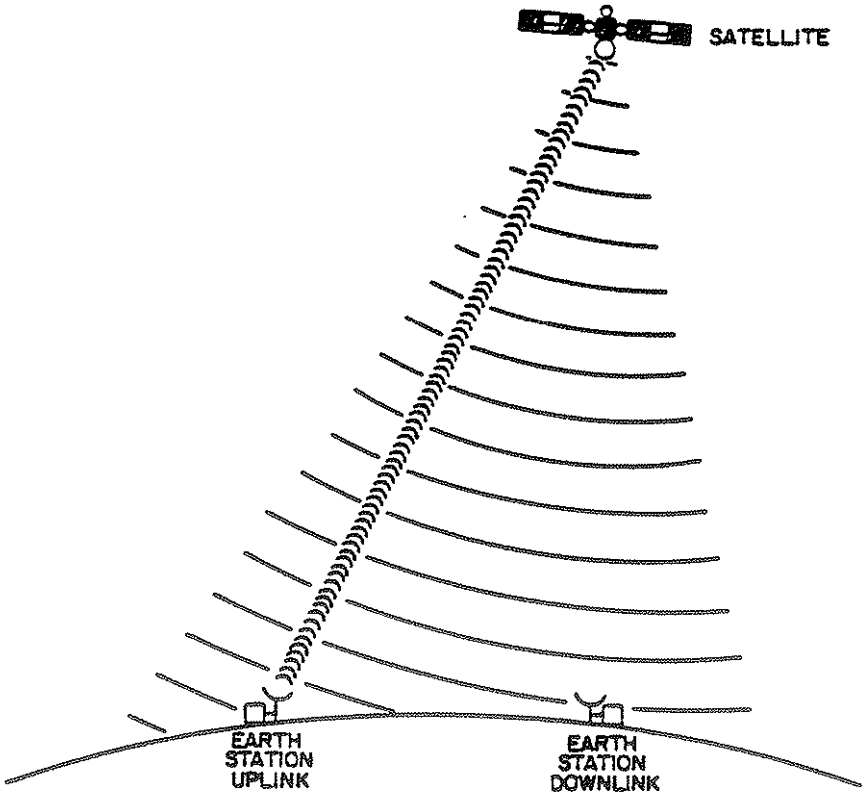
The study also stated that interest by rural electrics would increase as the program developed and understanding of the nature of bi-directional communications grew.

Bi-directional satellite communication technology is here today, and it will play a major role in worldwide communications in the future. Economic feasibility can be proven, and the interest shown and needs expressed by rural electrics are mounting. As cooperatives, we have always worked to find ways to provide better service in a more efficient way. Bi-directional satellite communication is another way we can do this. It could actually be today's key to keeping our great Rural Electric Program unified through better, more efficient communications.



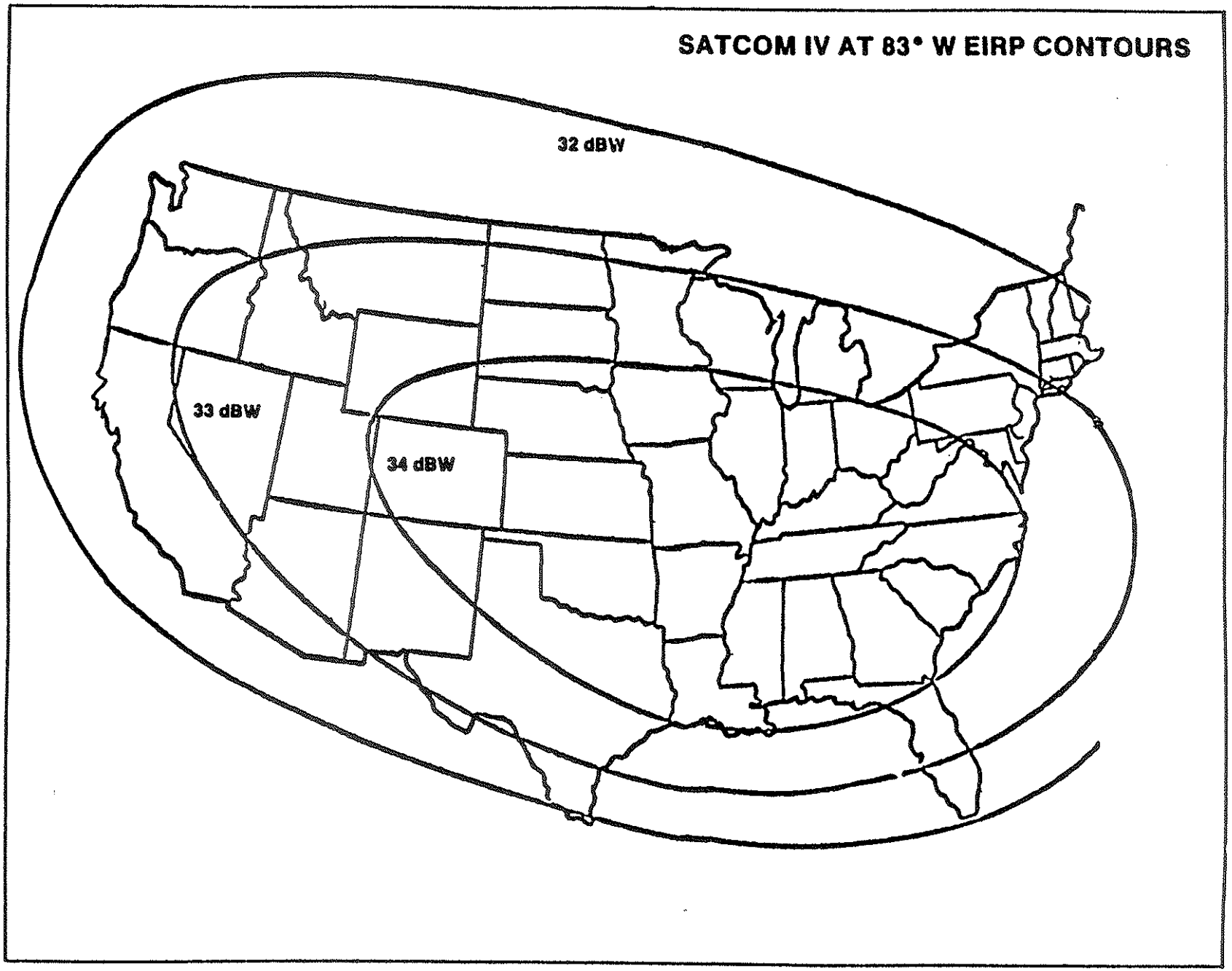
Location of Ku-Band Satellites in Orbit

Exhibit 1



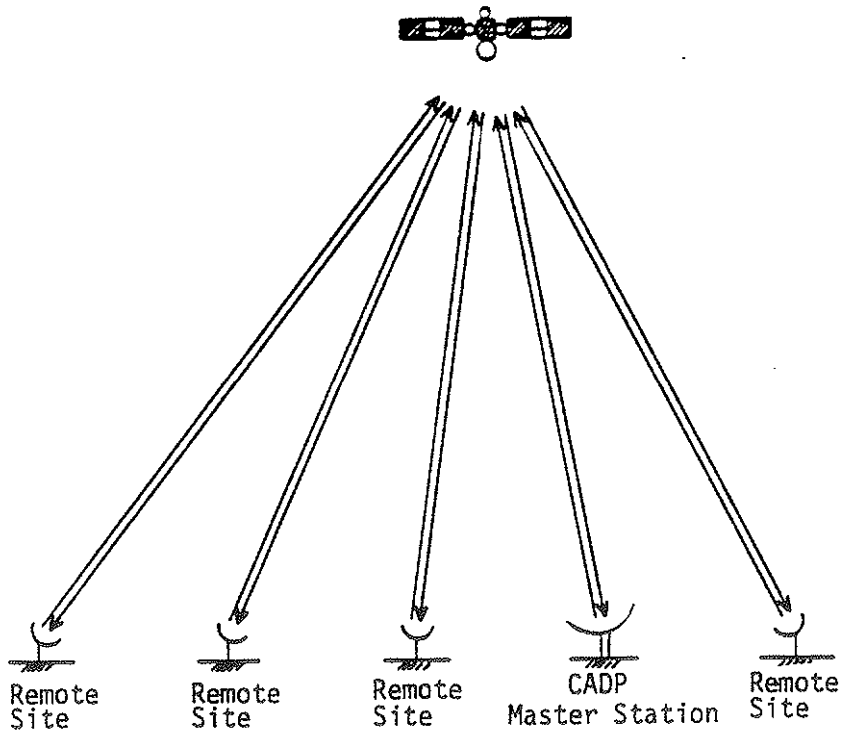
Typical Satellite Communication System

Exhibit 2



Footprint of a Satellite

Exhibit 3



Typical Data System

Exhibit 4

1 REMARKS OF WM. C. WALBRIDGE,
EXECUTIVE VICE PRESIDENT AND GEN. MGR.
SEMINOLE ELECTRIC COOPERATIVE, INC.
TO
RURAL ELECTRIC MANAGEMENT DEVELOPMENT COUNCIL
MYRTLE BEACH, S. C.
MAY 20, 1986

MARK TWAIN IS REPORTED TO HAVE SAID THAT THE MAN WHO GRABS A CAT BY THE TAIL LEARNS MORE THAN THE MAN WHO ONLY WATCHES. LEADERS GRAB CATS BY THE TAIL! THEY ARE THE DOERS, NOT THE WATCHERS. AND BY DOING THEY LEARN. A LEADER IS NOT AFRAID TO GET HIS HANDS DIRTY; HE IS WILLING TO TAKE CALCULATED RISKS. IN DESCRIBING THE DIFFERENCES BETWEEN A LEADER AND A MANAGER, ONE OBSERVER SAID, "A MANAGER THINKS ABOUT TODAY AND TOMORROW. A LEADER THINKS ABOUT THE DAY AFTER TOMORROW."

MOST OF YOU ARE MANAGERS, BUT YOU ARE ALSO RECOGNIZED AS LEADERS IN RURAL ELECTRIFICATION. YOU HAVE TO BE CONCERNED ABOUT TODAY, TOMORROW AND THAT WHOLE STRING OF TOMORROWS TO FOLLOW.

BEING INVOLVED IN RURAL ELECTRIFICATION YOU CAN IDENTIFY PERHAPS WITH THE LITTLE BOY WHO HAD JUST FINISHED HIS SECOND DAY IN KINDERGARTEN. WHEN HE GOT HOME HIS MOTHER ASKED HIM, "HOW WAS SCHOOL TODAY?" HIS REPLY -- "IT'S GETTING HARDER EVERY DAY!" WELL, I DON'T HAVE TO TELL YOU, RURAL ELECTRIFICATION IS GETTING HARDER EVERY DAY, WHETHER YOU ARE FROM A DISTRIBUTION COOPERATIVE OR A G & T!

HOWEVER, THAT FUTURE CAN BE MADE A BIT EASIER IF WE DO A BETTER JOB OF PLANNING FOR IT NOW. I SUBMIT THAT WE CAN DO THAT A BETTER JOB OF PLANNING ONLY IF WE HAVE GOOD COMMUNICATIONS BETWEEN THE G & T AND THE MEMBER COOPERATIVES. WITHOUT GOOD COMMUNICATIONS AND JOINT EFFORT WE WILL EACH MOVE FORWARD WITH ONLY HALF THE STORY. FOR TODAY'S POWER SUPPLY STRATEGY DEVELOPMENT, WITH SUPPLY SIDE AND DEMAND SIDE OPTIONS, HALF THE STORY WON'T DO THE JOB.

TODAY I WOULD LIKE TO SHARE WITH YOU SOME OF THE THINGS WE DO AT SEMINOLE THAT I BELIEVE FOSTERS THAT GOOD COMMUNICATION AND MUTUAL UNDERSTANDING NECESSARY FOR US TO MEET THE CHALLENGES OF THE FUTURE. WE HAVE A GOOD RELATIONSHIP WITH OUR MEMBERS. ITS NOT PERFECT; WE KNOW WE HAVE TO KEEP WORKING ON IT.

TO BEGIN WITH WE HAVE AN ORGANIZATIONAL MAKE-UP AT SEMINOLE THAT PROMOTES GOOD RELATIONSHIP. OUR BY-LAWS PROVIDE THAT EACH DISTRIBUTION MANAGER, BY VIRTUE OF HIS POSITION, WILL BE A VOTING MEMBER OF OUR BOARD AND WILL SERVE ON ITS VARIOUS COMMITTEES. I THINK THIS HELPS. THE MANAGER'S EXPERTISE IS IMPORTANT AND WE RECOGNIZE ITS VALUE. NEITHER THE STAFF NOR I FEEL THREATENED BY MANAGERS BEING ON THE BOARD..BY HAVING THEM TAKE AN ACTIVE LEADERSHIP ROLE, IT CREATES A FEELING OF PRIDE IN "THEIR" G & T.

OUR RATE COMMITTEE, COMPRISED TOTALLY OF DISTRIBUTION MANAGERS, PROVIDES A GOOD SOUNDING BOARD IN THOSE CRITICAL POLICY AREAS OF RATES AND LOAD MANAGEMENT STRATEGIES.

IN FLORIDA WE HAVE A GOOD NEWS-BAD NEWS STORY. THE BAD NEWS IS THAT OUR WHOLESALE RATES ARE HIGH - ABOUT 60 MILLS/KWHR. THE GOOD NEWS IS THAT WE HAVE HEALTHY LOAD GROWTH SO WE CAN FORESEE A BETTER FUTURE. THIS HIGH LOAD GROWTH BROUGHT US AN UNEXPECTED BONUS LAST YEAR. HIGH LOADS EARLY IN THE YEAR MEANT THAT WE WERE GOING TO EXCEED OUR REQUIRED MARGIN BY SEVERAL MILLION DOLLARS. WE TOOK THE INITIATIVE TO RETURN THIS TO THE MEMBERS, NOT AS CAPITAL CREDITS, BUT AS A $9 MILLION RATE DECREASE SO THEY COULD BE MORE COMPETITIVE NOW. THE POINT IS, WE SAW THIS AS THE MEMBERS MONEY AND INITIATED THE REDUCTION. WE DIDN'T WAIT UNTIL THEY ASKED FOR IT.

THE DISTRIBUTION COOPERATIVES' PERSPECTIVE IS STRESSED THROUGHOUT THE RANKS AT SEMINOLE. WE EMPHASIZE THAT SEMINOLE EXISTS ONLY TO SERVE ITS MEMBERS. THE FIRST THING A NEW EMPLOYEE HEARS FROM ME IN THEIR ORIENTATION PROGRAM IS "WE ARE NOT AT THE TOP OF THIS PYRAMID; WE HAVE ELEVEN MEMBER-OWNER-CUSTOMERS THAT ARE OUR BOSSES.

IT WAS NOT ALWAYS THAT WAY. BACK IN 1983 WHEN I WAS LOOKING FOR AN EXECUTIVE ASSISTANT I REALIZED THE NEED TO HAVE SOMEONE IN AN EXECUTIVE POSITION THAT COULD, AND WOULD, RELATE THE DISTRIBUTION PHILOSOPHY AND POINT OF VIEW. THAT

IS WHEN I HIRED BILL MILLER WHO HAD BEEN A DISTRIBUTION COOP MANAGER. MANY OF YOU KNOW BILL, A FORMER MEMBER OF YOUR COUNCIL.

SINCE THAT TIME WE HAVE INITIATED SEVERAL PROGRAMS THAT KEEP US AWARE OF THE PROBLEMS OF THE DISTRIBUTION COOPERATIVES AND ENHANCE TWO-WAY COMMUNICATIONS.

FOR EXAMPLE, EACH MONTH WE TAKE A GROUP OF OUR KEY MANAGERS AND EMPLOYEES TO A MEMBER SYSTEM FOR AN ORIENTATION/TRAINING VISIT. THESE ONE DAY VISITS OPEN DOORS OF UNDERSTANDING BETWEEN COOPERATIVE EMPLOYEES AND SEMINOLE STAFF. SINCE MANY OF OUR EMPLOYEES WERE NOT FAMILIAR WITH RURAL ELECTRIFICATION, IT HAS STRENGHENED THEIR UNDERSTANDING OF THE COOPERATIVE PROGRAM. WE ALSO ENCOURAGE MEMBER SYSTEMS TO VISIT OUR HEADQUARTERS AND POWER PLANT FACILITIES.

EACH MONTH IN OUR EMPLOYEE NEWSLETTER, WE SPOTLIGHT ONE OF OUR MEMBER SYSTEMS. THIS PROFILE PORTRAYS THE TYPE OF CONSUMERS IN THEIR AREA, SYSTEM STATISTICS AND PERSONNEL. WE TRY TO PASS ALONG THE FLAVOR OF THAT MEMBER COOP TO OUR EMPLOYEES THROUGH THESE ARTICLES.

THESE, AND MANY OTHER ACTIVITIES, ARE TO INSURE THAT OUR EMPLOYEES, ESPECIALLY THOSE HAVING CONTACT WITH THE MEMBERS, UNDERSTAND THE RELATIONSHIP BETWEEN THE G & T AND THE MEMBERS. DEPARTMENT HEADS AT THE EXECUTIVE LEVEL ARE

VERY SENSITIVE TO THIS RELATIONSHIP, BUT THAT IS NOT ENOUGH. WE WANT THAT SENSITIVITY IN ALL OUR EMPLOYEES.

OUR MANAGEMENT STRUCTURE IS DEEPLY INTERESTED IN INQUIRIES MADE BY MEMBER SYSTEMS. THERE IS NOTHING MORE DESTRUCTIVE OF A GOOD RELATIONSHIP THAN MAKING AN INQUIRY AND NEVER HEARING BACK. EMPLOYEES KEEP RECORDS OF CONTACTS THAT DEAL WITH POLICY, RELIABILITY OF SERVICE, RATES, REQUESTS FOR SUPPORT OR AREAS OF MISUNDERSTANDING. WE TAKE THESE INQUIRIES SERIOUSLY AND TRACK THEM TO INSURE THEY ARE ANSWERED AND ALSO TO IDENTIFY POTENTIAL PROBLEMS BEFORE THEY BECOME MAJOR ISSUES. INCIDENTLY, AT MY MONDAY MORNING STAFF MEETING IMMEDIATELY PRECEEDING OUR MONTHLY BOARD MEETING, MY STAFF AND I REVIEW THE STATUS OF ANY UNANSWERED INQUIRIES.

SEMINOLE HAS A COMMITMENT TO KEEP OUR MEMBER SYSTEMS INFORMED. WE BELIEVE THAT KNOWLEDGEABLE MEMBERS ARE SUPPORTIVE OF THEIR G & T. EACH YEAR WE HOLD UPDATE MEETINGS IN THREE REGIONS CONVENIENT TO THE MEMBER SYSTEMS. THESE MEETINGS ALLOW US TO GO INTO DETAIL ABOUT OUR PREVIOUS YEAR'S OPERATIONS AND OUR PLANS FOR THE CURRENT YEAR. IT PROVIDES THE OPPORTUNITY FOR TRUSTEES, MANAGERS AND KEY EMPLOYEES TO ASK QUESTIONS OF SEMINOLE MANAGEMENT. BY BEING OPEN AND HONEST, GIVING THE BAD WITH THE GOOD, WE HAVE GAINED TRUSTEES SUPPORT AND TRUST.

THIS SUPPORT PAID OFF THIS PAST SUMMER WHEN WE EXPERIENCED MAJOR BLADE DAMAGE ON BOTH OF OUR LARGE COAL UNITS, TAKING THEM OUT OF SERVICE FOR AN EXTENDED TIME. OUR MEMBERS WORKED WITH US TO EASE THE FINANCIAL BURDEN. THEY EASED A REAL TOUGH CASH FLOW CRISIS BY PAYING POWER BILLS EARLY AND LEAVING WITH US REFUNDS THEY HAD COMING.

ONE OTHER AREA I SHOULD NOTE IS HOW WE DEAL WITH THE NEWS MEDIA AND CONSUMERS OF OUR MEMBERS. THIS IS A SENSITIVE AREA FOR G & T'S. WE NEVER SPEAK DIRECTLY TO MEMBER/CONSUMERS OR REPORTERS ABOUT A MEMBER SYSTEM. WE REFER THEM TO THE MEMBER SYSTEM. IF A MANAGER ASKS US, WE ARE HAPPY TO ASSIST HIM IN WRITING NEWS RELEASES OR GIVING SPEECHES. BUT, WE DO NOT ASSUME TO SPEAK FOR THE MEMBER SYSTEM.

I HAVE COMMENTED ON SEVERAL THINGS WE AT THE G & T DO TO PROMOTE THE POSITIVE TYPE RELATIONSHIP THAT IS NECESSARY IF WE ARE ALL TO PULL TOGETHER. COOPERATIVE MEMBERS MUST ALSO WORK AT MAINTAINING A GOOD RELATIONSHIP WITH THEIR G & T.

THE TRUSTEE MUST WEAR THE G & T HAT WHEN SITTING ON THE G & T BOARD. THEY MUST LOOK BEYOND THEIR OWN SYSTEM AND BE CONCERNED WITH THE G & T AS A WHOLE. I KNOW THIS IS SOMETIMES DIFFICULT TO DO -BUT IT IS ESSENTIAL.

I AM SURE YOU ARE ACUTELY AWARE THAT MOST OF YOUR MONEY GOES TO THE G & T. IT TAKES A LOT OF MONEY TO RUN GENERATING PLANTS, ESPECIALLY WITH HIGH FUEL COSTS. WE DON'T EXPECT YOU TO BE THE CHEERLEADERS FOR THE G & T, BUT RESIST THE TEMPTATION TO CHARACTERIZE THE G & T AS A MONSTER THAT EATS UP MONEY AND CAUSES HIGH RATES. REMEMBER WE ARE YOU!

REMEMBER ALSO THAT COMMUNICATIONS IS A TWO WAY STREET. IF THE G & T PRESENTS AN INFORMATIONAL MEETING - ATTEND. TRY TO UNDERSTAND THE CHALLENGES OF POWER SUPPLY AND THE POSITION OF THE G & T. KEEP THE LINES OF COMMUNICATIONS OPEN. DON'T LET LITTLE PROBLEMS BECOME MAJOR ISSUES BECAUSE THEY AREN'T ADDRESSED.

OUR PROGRAM HAS A BIG JOB AHEAD. WE CAN MEET THE CHALLENGES, THE PROBLEMS OF THE FUTURE, ONLY IF WE COMMIT TO WORK EFFECTIVELY AS A TEAM.

The Effects of G&T/Distribution System Relations on Strategic Power Supply Planning

Donald R. Norris
President and General Manager
East Kentucky Power Cooperative, Inc.
Winchester, Kentucky 40391

The Rural Electric
Management Development Council

"Shaping the Future"

Sheraton Inn
Myrtle Beach, S.C.

May 20, 1986

Outline of Remarks by Donald R. Norris

I. Introductory Remarks

- A. Importance of Good Relations
- B. EKPC Mission
- C. EKPC Philosophy of Management
- D. EKPC Long-Range Strategic Plan (Attachment)

II. Involvement of Member Systems at EKPC

- A. Committee Structure/Alternate Directors
  1. Operations
  2. Power Planning and Major Projects (PPMP)
  3. Fuel and Environmental (F&E)
  4. Tours of facilities/board meetings at facilities
- B. Attendance at EKPC Board Meetings
  1. Participation
  2. Guests
- C. Quarterly Managers' Meetings
- D. Interaction with Member Systems
  1. Attendance at board and annual meetings
  2. Video tape of EKPC board meeting
  3. Articles for newsletters
  4. Tours of EKPC facilities
  5. Information and training for employees
  6. Wholesale Rate Design
     a. Public Service Commission
     b. Time of Use (Attachment)
     c. Proposed Rates for Industry
  7. Load Research Projects and Data
     a. Time of Use
     b. Thermal Heat Storage
     c. Small commercial and other
     d. Rate case assistance

E. Load Forecasting (Attachment)

1. Preliminary by EKPC
2. Visit, judgment, knowledge of area
3. Econometric/REA Bulletin 120-1
4. Future is at stake

F. Fuel Supply and Purchasing

G. Environmental Assistance

H. Marketing

a. Area Development
b. System Load Factor Improvement
c. Resource Utilization
d. Load Duration Curve
e. Match of Generation and Load
f. Market of system
g. Interconnection capability
h. Research

III. Summary

EAST KENTUCKY POWER COOPERATIVE

LONG-RANGE STRATEGIC PLAN

Developed by

EKPC Board of Directors
Member System Managers
EKPC Management Team

October 1983

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EKPC STRATEGIC PLAN

Executive Summary

EKPC has a responsibility to provide wholesale electric power to the member systems' substations, or load centers, at the lowest possible cost consistent with sound business practices. We also have a responsibility to provide additional related services. Lots of thought and planning are needed to meet these important responsibilities.

A strategic plan is a careful, well thought out plan to efficiently and effectively utilize existing or planned facilities and resources to accomplish organizational responsibilities. The planning process which has taken place at EKPC throughout most of 1983 has been a beginning. The strategic objectives in this plan provide a broad foundation for the later development of specific strategic goals and annual plans to accomplish our mission. These strategic objectives provide the management of EKPC, which includes the Board of Directors, their alternates and the internal EKPC management team, a common sense of direction to assure unity of action. This broad plan gives us the background for achievable long-term objectives and will help us determine the needed short-term goals required of each of us.

This document represents the collective concerns, ideas and expectations of the EKPC Board of Directors, Member System Managers and the EKPC management team. Combining input from every member of these groups has resulted in team strategy and a plan for the whole team. The Board of Directors, Member System Managers and the internal EKPC management team, including supervisors and foremen, are committed to the strategic objectives in this plan and to our mission. Our combined efforts and commitment to this Cooperative and the Member Systems will enable us to successfully meet the challenges and opportunities that confront us daily in this complex and ever-changing industry.

Donald R. Norris
President and General Manager

October 11, 1983
Date

Roy C. Smith
Chairman, Board of Directors

October 11, 1983
Date

EKPC LONG-RANGE STRATEGIC PLAN

EKPC Mission Statement

The primary purpose for EKPC's existence is to provide to the proper load centers the wholesale electric energy requirements of member cooperatives, to provide other related services, and to fulfill this mission at the lowest possible cost consistent with sound business practices.

EKPC Philosophy of Management

We, the members of the Board of Directors and the EKPC management team, shall abide by the following principles, guidelines and philosophies in the operation, administration, direction and management of this Cooperative:

- the EKPC mission will guide the direction of all plans, budgets and operational functions to assure that our primary purpose is always foremost;
- all decisions and actions will reflect responsible consideration and concern for the singular and collective needs of member consumers of the member systems, the member systems, EKPC, and other individuals and organizations affiliated with the Cooperative;
- the management of EKPC will strive for unity, efficiency and effectiveness of effort in overseeing the day-to-day operations of this organization;
- all management activities and decisions will reflect cost-consciousness, cost-efficiency and the responsible allocation and use of all Cooperative resources;
- Cooperative policies, procedures and guidelines will be administered equitably, judiciously and consistently throughout the organization;
- all human resource activities will emphasize humanity and concern for this most valuable Cooperative resource;
- all Cooperative activities will demonstrate genuine concern and consideration for the member consumer who pays for and ultimately benefits from all Cooperative activity.

Broad Objectives

1) To formulate, interpret and administer in a timely manner Cooperative objectives, budgets, policies, procedures and strategic plans as established by the Board of Directors and/or the EKPC management team in order to fulfill the mission of East Kentucky Power Cooperative.

2) To oversee, direct and evaluate the operation of EKPC in accordance with all Board and lending institutions' policies and procedures, as well as applicable federal, state and local laws as they relate to the Cooperative.

3) To strategically guide the activities of EKPC through the functions and delegated managerial responsibilities of all Divisions.

4) To provide for interaction and liaison between EKPC, REA, CFC, federal and state regulatory agencies and any industry-associated entities.

5) To support as operational guidelines the principles of universality, democracy, equity, economy, publicity, unity and liberty (called the Rochdale Principles) in carrying out the responsibilities of this Cooperative.

6) To strive constantly to represent EKPC and the member systems as credible, effective, professional representatives to all who come into contact or have association with this organization.

7) To develop programs which will enable all employees and individuals associated with the Cooperative to interact and function as objective team members representing the best interests of the Cooperative and its resources.

8) To operate with an organizational structure which will encourage the continued optimal performance of EKPC.

9) To promote public benefit and fulfill our corporate citizenship responsibilities through activities which preserve and demonstrate respect for our natural resources.

10) To provide the member systems a dependable and adequate power supply, as determined by system load forecasts and necessary reserve requirements, at the lowest possible cost consistent with sound business practices.

11) To assure compliance with all federal, state and local environmental regulations and requirements regarding the generation and transmission of electric energy.

12) To design, construct, operate and maintain all EKPC facilities safely, reliably and responsibly.

13) To allow for optimum use of all EKPC facilities through comprehensive planning, commitment to a system-wide program of preventive maintenance, and on-going self-evaluation.

14) To assist the member systems in the projection of future system requirements using available technology to encourage accuracy, uniformity and consistency in long-range projections and to provide adequate reserve.

15) To plan, operate and evaluate programs and systems in the area of energy management to provide for the utilization of the present and planned power supply system and the efficient use of electric energy by the EKPC member systems and their retail electric consumers.

16) To continue to support and be an active participant in national, regional, statewide and area planning activities with others in the energy industry.

17) To pursue and negotiate mutually beneficial interconnection agreements and active interchange power relationships with all utilities.

18) To maintain the financial stability of EKPC and demonstrate the member systems' sound and viable financial position in order to enable EKPC to take advantage of financing at the lowest possible cost.

19) To plan, develop and coordinate activities with the member systems and area industries, both existing and potential, to market the use of electric energy consistent with sound business practices.

20) To pursue sale of part of J.K. Smith or joint ownership of future facilities to enhance the financial stability of EKPC.

21) To seek and encourage off-system sales of available capacity to provide for prudent and economic use of facilities and resources.

22) To provide personnel functions which facilitate the recruitment, retention and on-going development of a qualified workforce and promote employee welfare through an equitable compensation program.

23) To comply with federal and state employment laws and all OSHA regulations for the benefit of the Cooperative and its employees.

24) To provide a safe workplace environment for all employees and Cooperative visitors in order to assure their safety and demonstrate respect for the value of human life.

25) To develop a rate structure and rate policies which will reflect the EKPC philosophies and support a competitive stance for the Cooperative within the utility industry.

26) To encourage the level of planning and decision-making required in a complex, highly technical and technologically up-to-date organization.

27) To provide for the acquisition of fuel resources in appropriate quantity and of acceptable quality, from responsible sources at the lowest achievable competitive price, by continually monitoring and reviewing our procurement procedures and supply requirements.

I. EXECUTIVE SUMMARY

This report contains the 1986 - 2005 forecast of energy and peak demand for East Kentucky Power Cooperative (East Kentucky) and its 18 member distribution systems.

Average Annual Forecast Growth Rates

(%)

	1986-1996	1997-2005	1986-2005
Total Energy Requirements	3.0	3.0	3.0
Winter Peak	3.2	3.4	3.3
Summer Peak	3.3	3.4	3.4
Residential Sales	2.9	3.4	3.2
Small Commercial Sales	2.9	2.4	2.7
Large Commercial Sales	3.4	1.4	2.4

East Kentucky works with its member systems in preparing the load forecast. Preliminary projections of member system load, excluding large commercial sales, made through use of regression analysis on historical load, are prepared by East Kentucky. Factors considered in preparing preliminary loads include population and demographic trends, price, price of alternative energy, and income. Each member system reviews its projections for reasonability, with adjustments made when needed. The resulting final forecast for each member system reflects a rigorous analysis of historical load trends combined with the experienced judgement of the member system manager and staff. Projections for the 18 member systems are summed to compose East Kentucky's forecast for the 20 year period.

Exhibit 9

Member Cooperative Historical Load Factors

	1980	1981	1982	1983	1984	1985	1980-1985 Avg.
Big Sandy	46	45	39	41	41	39	42
Blue Grass	40	38	34	34	38	34	36
Clark	48	47	41	40	47	43	44
Cumberland Valley	44	44	39	39	45	43	42
Farmers	43	41	36	35	40	39	39
Fleming-Mason	52	52	49	48	54	52	51
Fox Creek	41	40	36	35	41	38	39
Grayson	47	45	40	40	43	41	43
Harrison	46	42	39	38	45	41	42
Inter-County	41	43	42	35	42	38	40
Jackson County	46	43	39	38	43	40	42
Licking Valley	44	43	38	38	41	40	41
Nolin	45	42	37	37	42	39	40
Owen County	46	40	36	36	42	39	40
Salt River	50	49	43	43	46	45	46
Shelby	46	42	39	41	45	43	43
South Kentucky	44	43	37	36	42	38	40
Taylor County	46	45	40	41	47	44	44
EKP	49	47	40	40	46	43	44

The data used to calculate load factor are billing data; the peak demand is that reached any month during the calendar year. The peak demand for East Kentucky Power is the coincident peak demand. Energy used in East Kentucky Power's calculation includes transmission losses.

RULES AND REGULATIONS

Wholesale Power Rate Schedule

BILLING DEMAND

The billing demand is the arithmetic sum of the maximum kilowatt demands measured (and adjusted for power factor as provided below) at all points of delivery. The maximum kilowatt demand at each load center shall be the highest average rate at which energy is used during any fifteen-minute interval in the below-listed hours for each month:

Months	Hours Applicable for Demand Billing - EST
October thru April	7:00 A.M. to 12:00 Noon 5:00 P.M. to 10:00 P.M.
May thru September	10:00 A.M. to 10:00 P.M.

Demands outside the above hours will be disregarded for billing purposes.

FOR All Counties Served
Community Town or City

P.S.C. NO. 17

ORIGINAL SHEET NO. 1

EAST KENTUCKY POWER COOPERATIVE, INC.
Name of Issuing Corporation

CANCELLING P.S.C. NO. 16

ORIGINAL SHEET NO. 1

CLASSIFICATION OF SERVICE

	RATE PER UNIT
Wholesale Power Rate Schedule	
AVAILABILITY Available to all cooperative associations which are or shall be members of the Seller. The electric power and energy furnished hereunder shall be separately metered for each point of delivery.	
MONTHLY RATE - PER SUBSTATION OR METERING POINT	
Load Center Charge: $1,069 per month for each energized substation. In the event of joint utilization, this charge shall be divided equally.	
Demand Charge: $7.82 per KW of billing demand	
Energy Charge: All kWh $.02568 per kWh	
Minimum Monthly Charge: The minimum monthly charge under the above rate shall not be less than $1,069 to each member of each energized substation (metering point).	

DATE OF ISSUE June 1, 1985 DATE EFFECTIVE June 1, 1985

ISSUED BY Donald R Norris TITLE President & General Manager
Name of Officer-Donald R. Norris

Issued by authority of an Order of the Public Service Commission of Kentucky
9171 Dated May 7, 1985

Additional comments by Don Norris:

Has been in rural electrification since 1949.

It is imperative that G&T and REC work closely on all problems and challenges.

Involvement - G&T's and distribution systems must be involved with each other.

To achieve effective strategic plans - develop good policies - use them - change when necessary.

East Kentucky PC has 18 member systems. No managers serve on the East Kentucky Board. There are six managers and six directors on each committee. Manager can serve as alternate delegate to Board. Has a right to speak.

East Kentucky has been operating power plants for 31 years. The systems are tied to fuel and coal. Coal miners and owners are members of the RECs. Must work closely with the coal suppliers. This presents a special member and public relations problem. G&T employees and REC managers get very involved because of being located in coal mining country.

Don speaks at REC's annual meeting and talks about return of credits to members through power cost adjustment (flow-thru).

New program - G&T works with small miners trying to help them know what G&T must have in way of coal specs. REC managers idea.

REC managers attend all G&T board meetings. Invite other directors and key staff to attend board meetings. Two items always on agenda - talk about member concerns and lastly, items for discussion for next board meeting.

Quarterly managers meetings - (managers only with G&T managers) - request agenda items for this meeting.

Let REC's know they (G&T manager and staff) would be happy to attend REC board and annual meetings. Visited each of 18 members over 2-year period. Attends all REC annual meetings.

Video tapes board meetings - interviews some board members, staff - 15 minute tape, sends to all 18 member systems. Use this for board reporting to local REC.

Provides news releases on power supply for newsletters, employee papers, etc. Encourages visits to power generating plant.

Each committee tours various G&T sites to help make good decisions (G&T facilities, coal miles, etc.).

One of first G&T's to have a TOU rate. Have reduced demand charge $500,000.

Rate department assists REC's with rates and SUC presentations.

Coordinates development of large power rates to attract industry. New rates make us very competitive with IOU's.

Show REC's that when one co-op gets a large load, all systems benefit. Need to work so REC's can get the same benefits of IOU's which are vertically integrated. Must stay competitive.

Additional comments by Don Norris (continued)

One key thing - load forecasting - working with member systems. Must be REC's load forecast - G&T helps. Uses data (REA 120-1). G&T provides preliminary load forecast, goes to REC and sits down with local staff and refines forecast. This is our planning tool for future plant.

Have been able to work with REA/REC and G&T to develop reliable forecasts.

Environmental concerns - G&T must have staff to deal with these concerns, air, water, PCB's, etc. Provides support.

Marketing - area development - load management - selling power and energy. Marketing excess power through interconnections.

G&T and REC must work hand in glove. Doesn't mean they always agree.

Communication - cooperation - competition. Another C - change. If manager and staff haven't changed, we have a big problem.

G&T Board members must wear G&T hat.

Harold Smith, General Manager
Flint Electric Memb. Corp.
Reynolds, Georgia

SUPPLY/DEMAND PLANNING

- Definition: A planning approach that shows the impact of both EMC and G&T decisions on the consumer's bills.

- Goal: To minimize power cost for the consumer through EMC and G&T cooperation and communication.

- Communicates to the EMC the high G&T costs which result from inefficient use of electricity.

- Communicates the interdependence of:

  a) the EMCs' load forecasts
  b) the G&T's multi-million (or multi-billion) dollar construction program
  c) G&T rate increases

- EMC Responsibilities:

  1. Identify and implement programs to promote efficient use of electricity (insulation, load management, time-of-use rates, etc.)
  2. Influence the type of growth (such as promoting heat pumps, discouraging potential loads with poor load factors.)
  3. Realize that some demand programs will work for some EMCs and not for others.
  4. Realize that some ideas may fail altogether and don't give-up. (Ford made the Model T, the Mustang and the Edsel but overall they were highly successful.)
  5. Communicate both successes and failures to the G&T, primarily but not solely, through the EMC load forecast.

- G&T Responsibilities:

  1. Identify the least costly means of supplying the Member EMCs and explain why the given approach was chosen.
  2. Communicate to the Member EMCs the G&T's cost of inefficient use of electricity.
  3. Assist the EMCs in quantifying the full benefits of a demand program. G&T benefits can be understandably overlooked by an EMC. (This is one intent of Oglethorpe's Demand Handbook.)
  4. Recognize that just as the EMC communicates primarily to the G&T through the load forecast, so that G&T communicates to the EMCs primarily through its rate. Therefore, establish a G&T rate (and a stable rates policy if possible) which fully rewards EMCs that implement beneficial programs and penalizes these which do not.
  5. Establish procedures for regular updates. This keeps both the G&T and EMC on-track, forces communication and helps assure the prudency of actions taken by both.

ANNUAL LOAD FORECAST DEVELOPMENT
INTERACTION BETWEEN OPC AND MEMBER SYSTEMS

- An update of the load forecast (PRS) is developed each year as a joint effort between OPC and the Member Systems.

- The EMC manager appoints a Load Forecast Officer (LFO) to serve as the contact person with OPC staff.

- The LFO provides updates of historical data each year.

- The LFO provides forecast inputs for:

    - o Residential consumers served in each county
    - o Individual commercial and industrial consumers 1,000 kVA or greater
    - o Irrigation energy sales
    - o Non-coincident peak load factor
    - o Distribution system losses

- The LFO also provides information to:

    - o Evaluate the effects of competition from alternative fuels
    - o Interpret end-use survey results
    - o Interpret county economic trends and forecasts
    - o Evaluate alternative rate increase scenarios

- OPC staff collects and enters data on a central data base and secures economic and demographic forecasts.

- OPC staff develops and maintains econometric and end-use models to forecast residential and small commercial energy use.

- OPC staff develops and maintains a system to compile forecasting model results and forecast inputs provided by the LFOs into a system to produce the annual forecast reports.

- OPC staff, the LFO and other EMC staff involved in the forecasting process meet several times a year to review the input assumptions and results of the forecast.

    - o A series of workshops will be conducted this year a few weeks after the preliminary forecast is mailed to the FLOs. In the past, a single workshop has been conducted to distribute and review the preliminary forecast.
    - o OPC staff visit individual EMCs during the process of updating historical data and developing assumptions and then another series of visits are conducted after the workshops during the review period of the preliminary forecast.

- OPC compiles the final forecast revision, prepares a report and submits the load forecast (PRS) to REA for approval.

- OPC and the Member Systems work together to conduct residential end-use surveys on a bi-annual basis to support end-use forecasting efforts, marketing efforts and to satisfy the REA requirement that these surveys be conducted periodically.

NEED FOR NEW SERVICE POINTS
COORDINATION BETWEEN G&T AND DISTRIBUTION COOPERATIVE

Long Range Needs

1. Long Range Work Plan

   - Identify areas where substations may be needed.
   - Determine approximate timeframe for new substations.
   - Get preliminary details of the type of substation required, eg. high-side voltage, low-side voltage, size of transformer.

2. Fifteen-Year Substation Forecast (Annually)

   - Communicates to G&T the Member System's anticipated timeframe for new service points.
   - Allows G&T to gauge future substation requirements.
   - Forecast should be updated annually.

Short Range Needs

1. Two-Year Work Plan

   - Gives accurate picture of existing distribution system.
   - Identifies current problems and proposed solutions. Is often an early indication of need for new service point (even beyond period covered in the Work Plan).

2. Annual Planning Meeting

   - Discuss planned transmission facilities in the EMC service area.
   - Discuss future service point requirements and refine timeframes.
   - Discuss adequacy of existing service points.
   - Discuss timing of all projects currently underway which affect EMC.

3. Application for New Service Point

- Provides detailed information on EMC's project requirements. Should be received two years in advance of required cut-in date to assure sufficient time for engineering and construction of project if new transmission facilities are required.
- Provides economic analysis of other alternatives considered.
- G&T provides data on transmission costs for use in the analysis of need for the new service point.

4. Economic Development Activities

- Economic Development Department must work closely with the EMC and G&T planning to insure that the needs of the EMC and the consumer are met.
- New service point for economic development type load could be used to correct existing or future distribution discrepencies.

5. Scheduling Activities

- If a new service point is deemed to be not needed by the projected cut-in date, the EMC will be consulted about a change in the cut-in date.
- Factors leading to this change would be unrealized load growth or physical changes on the system.

Additional comments by Harold Smith

Agree wilth Don Norris and Bill Walbridge on basic elements of good G&T/REC relationship. Put "them" and "us" out of our vocabulary and substitute "we".

Oglethorpe has committees made up of REC managers and directors. Transmission system is jointly owned by EMC's, municipals, and GP&L - "integrated transmission system." Adds another dimension to strategic planning.

G&T buys 49% of power it sells. (Owns 30% of nuclear plant - PR problem, but is cost effective; 30% of one coal fired unit; 60% of one coal fired unit; buying 30% of one nuclear plant.) Oglethorpe doesn't operate any of these plants.

Started in 1974 - to cost $800 million. Latest estimates, cost will be $8.4 billion. Key element - G&T and REC needs to "sing same song and the same note" of this project.

Must work together - REC's responsibilities vs G&T. Ultimate goal - member at the end of the line. Has the power needed, when needed, and at the lowest possible cost.

REC's need to identify those programs which promote efficient use. Some REC's in Georgia are winter peaking, others summer peaking.

Can influence types of load. Heat pumps are a good load - will help level out load. Need to look at things that work and things that don't work. Use of natural gas. Each system must look at their particular needs and also focus in on how G&T will be affected. Went with dual controls, not working - shared experience with other REC's through G&T.

G&T needs to identify the least costly method of meeting power supply needs. G&T looking at pumped storage for peaking. Once study is complete, need to communicate results with REC's. G&T must assist REC's in evaluating best load management practices for them.

Example: Can give water heater wrap to member - will pay back in one year on peak shaving. G&T needs to do this instead of each of REC members (39) doing the evaluation.

G&T needs to provide a variety of load management ideas, alternatives for REC's to choose from.

G&T meets with REC first to get economic data before doing load projections. REC appoints load forecast coordinator to work with G&T in load forecasting. No one knows local area better than local people. Talk about demographics, load potential, line losses, alternative fuels (gas, fuel, oil, etc.).

End use survey - what is member really going to do with electricity? Study what effect rates truly have on people. (Where is the break point? the magic line?)

REC is into a TOU study - pilot study for G&T. G&T needs to collect load forecast data and process information and provide information for whole state. Develop an economical model. G&T uses 38 factors in their model.

Additional comments by Harold Smith (continued)

G&T's need to collect data from all EMC's to come up with economic and demographic forecast. G&T can also work on annual reports for REC's. Meetings must be held during the initial preparation of data which goes into the forecast. Agree on the assumptions.

REA generally approves if G&T and REC both approve load forecast. G&T does load forecast on biannual basis.

G&T must justify a new delivery point. Identify where needs are; time frame; type voltage. Plan in advance. REC must justify to G&T.

REC's and G&T's must integrate planning. (Have cases where two cooperatives have circuits out of substation. Some where IOU, municipal, and REC have circuits going out of the station.

Land prices are so great, G&T's are buying land for substations not needed for ten or more years. Must explain to REC's. REC's must show G&T they have looked at alternatives, conversion, etc. with good economics. Information is evaluated by G&T committee.

Economic development - most distribution systems don't know how to get into economic development. They feel this should rest predominately with the G&T. Feels they have more expertise in this area.

COMMENTS BY JIM KILEY
(replacing Bob Roberts, Manager of Pioneer REC)

Gave an update on things going on in the Dakotas. In South Dakota there are 32 distribution cooperatives and 2 G&T's. Total served is slightly less than Lee County. (50% hydro, 50% steam generated.)

Organization structure excludes district managers. Managers may serve on advisory board but not on G&T Board. Trying to change this. Made a report on this at statewide meeting in South Dakota. Eight to ten systems got together to study the situation. A report was shared with the distribution managers in South Dakota. The managers met to discuss what should take place to get managers involved in power supply issues. The need for this meeting grew out of concern in the areas of power supply, legislative relations, marketing, financial management, and system operations.

The group pointed out instances where there were failures or almost failures in these areas when they presented the report to the G&T's. The G&T's officially approved acceptance of this report. Some of the areas pointed out included meeting conflicts, rates developed which weren't applicable to REC's, proposed G&T write-off, use of margins, didn't look at affect on TIERs of member systems, managers not permitted to serve on boards or board committees, power supply costs so great; must find ways to get managers more involved with G&T's. If we had arrangement like Seminole or East Kentucky, it would meet needs.

G&T structure needs to be amended to permit best qualified and interested persons to serve on board or G&T committee.

Need to use managers and board members with lobbying skills in legislative areas.

In marketing, must find ways to get and keep more of the market. Program must be cost based with a payback. G&T and REC must be involved.

Need to find viable means of financing.

REC's need to be given opportunity to recruit capable people, train, develop and compensate. Must match members/employees/board expectation.

Co-op neighborly system seems to be on the wain - need to restate values. Need structural change for more meaningful involvement of system management.

South Dakota managers adopted the report and will work on follow-up to more meaningfully involve managers.

DISCUSSION, QUESTIONS AND ANSWERS FOLLOWING PRESENTATIONS ON THE EFFECTS OF G&T/DISTRIBUTION SYSTEM RELATIONS ON STRATEGIC POWER SUPPLY PLANNING

Q. Why didn't you invite "mean, bad G&T" managers?
Q. How did directors respond to the South Dakota managers report?
A. The 10 directors who attended the meeting were most enthusiastic. Will make same presentation before Basin's membership.

Q. Is the problem you described indigenous to the upper midwest?
A. Yes, managers in this area have just turned it over to G&T.

Q. Bill, what size systems does Seminole serve?
A. Lee and Clay over 90,000; one system over 100,000 consumers; also a range from 15,000, 20,000 to 40,000.
Q. Equal votes?
A. Yes. Seminole has manager/board member board. Pretty even participation on various committees.
Q. How can there be equal representation of the individual members?
A. There is a of discussion, but decisions come out alright. Three systems provide 60% of the revenue.

Comment: Look at equity of G&T's as opposed to REC's. Does this need to change to provide more equity for G&T to obtain funds?

Don: Support building of equity in REC's. But, if wholesale power contract is not a strong instrument, will not be security for bonds.

Q. If courts uphold validity of power contract, can G&T get financing?
A. In my opinion, yes.

Q. What is the G&T capital credit rotation policy?
A. East Kentucky has never rotated. We have 3 to 4% equity. Would like to have on a 15-20 year rotation.
A. Oglethorpe is on a 15-year rotation.

Q. This is a time of innovation. G&T boards are somewhat politically effective. How can we get innovative rates with G&T?
A. Florida is not under public utility commission for rates. Innovative retail rates rest with G&T, working with REC. Have gone to aggregate coincident demand. Worked with rate committee to develop rates which were cost based. Now REC has the opportunity to optimize the use of their system.
Q. True cost of service rates? Somehow we've neglected difference between slow growing and fast growing system as related to G&T capacity.
A. Don't load demand charge with cost of excess capacity, isolate costs of excess capacity, prorate and surcharge for those fixed charges to each co-op. Can't justify a load management system if there is no demand charge.

A. East Kentucky is trying to come up with innovative things. Under the public utility commission, we have responsibility to be innovative in rates which are to the best advantage of our members.
A. Seminole fortunate our capacity takes care of 85% of energy needs, have to buy from IOU power to meet peak demand. Our problem is to give the right signal to build up off peak load.
A. Oglethrope - REC members agreed on an industrial rate rider - couldn't compete with power companies for industrial loads with cost factor 62% or above. This was approved.

Q. Mentioned verticle integration. Do we have the best structure to meet future needs? What is the best way to go?
A. Verticle integration would be costly to us. Need 35 to 40% equity.

Bill: IOU's are looking at possibility of spinning off generating plants.
Don: Verticle integration is not the way to go. Must keep in mind member at the end of the line pays the bill. We must find ways to assure this isn't overlooked. Need to vertically integrate economic development. Need to vertically integrate our services .

Comment: Most G&T's are young organizations. Yet we're in a business that requires long range strategic plans. Involve all REC's and where possible, involve individual members themselves.
A. Oglethorpe has a long range strategic planning process. Hold regional meetings to help REC's understand and relate to plan. Also have a 5-year plan. Process is very effective.
Q. It seems you do a lot to get around fact that you're not vertically integrated?
A. Think a lot is perception. REC's think we've created this G&T monster and it's going to devour us.
A. May be a process of evolution.
A. Yes, to some extent, we're going over hurdles. Members at end of line are happy with their service.
A. Don't really know who is out there. We are doing things differently.
A. We really need to question the principles of one member - one vote.

Q. Function and role of managers/committees?
A. Seminole - committee meets, receives presentations. Makes recommendations to full Board. Don't have a replay of committee meetings and board meeting next day.
Q. Haven't heard comment "committee runs show?"
A. No.

A. Oglethorpe committee doesn't have representation of all co-ops on all committees. Meetings are open to all members. Agenda for committee meeting is sent to all co-ops. Committee reports are not automatically accepted.
A. East Kentucky - committee meets, develops recommendation. Chair presents report. Committee meets day before board meeting (12 committee members: 6 board members - 6 managers - rotates each three years, one-third rotated each year.)

THE EFFECTS OF G&T/DISTRIBUTION SYSTEM RELATIONS ON STRATEGIC POWER SUPPLY PLANNING

Anthony Pisano, National Director of Marketing with Alexander Grant & Company, was moderator for a panel made up of three G&T cooperative managers who presented their indivividual views on the subject.

Remarks by Mr. Pisano following the panel discussion:

Need to clarify objectives, listen carefully with and to colleagues and seek to understand the relationships which effect G&T and distribution cooperatives.

The program theme for this year - Shaping the Future - how effective are we in shaping the future?

Pinpoint key issues, factors, beliefs, values, policies which presently govern relationships between G&T and distribution systems.

What changes do we need to begin considering if we are to shape the future more effectively?

Have found study of G&Ts and their makeup very complex.

If the objective statement is providing adequate, dependable service at the lowest possible cost - is the structure in tune with that future? Are the mechanisms in place? Are we able to maximize the relationship inherent in the present structure.

Do we need to start looking at G&T system relationship in some significant and different way?

Shared with the group a video by Joel Barker - **"Discovering the Future - The Business of Paradigms"** (Film Media, Inc., 10740 Lyndale Avenue, South, Minneapolis, Minnesota 55420). The video dealt with how to anticipate change and cope/deal with it and presented the following information:

Paradigms (patterns) (a set of rules that defines boundaries) - have negative and positive effects. Paradigms constantly filter incoming experiences. We select certain information and ignore other.

Our own rules keep us from successfully discovering the future.

The power and influence of paradigms (how they influence the world):

1. Card deck paradigm - kept from seeing those cards that break the rule
2. Fitness paradigm - running paradigm
3. Automobile paradigm
4. Bicycle seat - easy seat
5. Zerox paradigm. "Made in Japan" - change of paradigms - (from 1960 to date quality has reversed)

Paradigms - influencing our perceptions. If it doesn't fit our paradigm, we don't see it.

People who think something cannot be done, need to get out of the way of those doing it!

Paradigms are:
1. Common
2. Useful
3. Warning - something we see only our way - paradigm paralysis
4. Outsiders - people who create paradigms
5. Courageous
6. Choose to change paradigm (shake off one; adopt a new one)

Have paradigm flexibility - be open to change.

Don't sit and wait for the phone to ring - get out and do something!

Why did you like the film? What did it suggest?

1. Challenges - change our thought processes - remove the blinders.
2. Low cost power - adequate, dependable (is service more important than the price tag?)
   Marketing electricity as opposed to "taking it as it comes".
   If getting value, price is secondary. (Conservation is saving natural resources.) (Comfort and convenience.)

   What does the consumer really want? Don't just assume you know.
   Unless we (distribution co-ops) know what consumer really wants, how can we transfer this to G&Ts.

   What gives a cooperative a competitive edge?

3. REA and low cost financing - always had it - how well will we be able to get along in the future without it?

   Members challenge creditability.

   "It is important not to mistake the edge of the rut as the horizon."

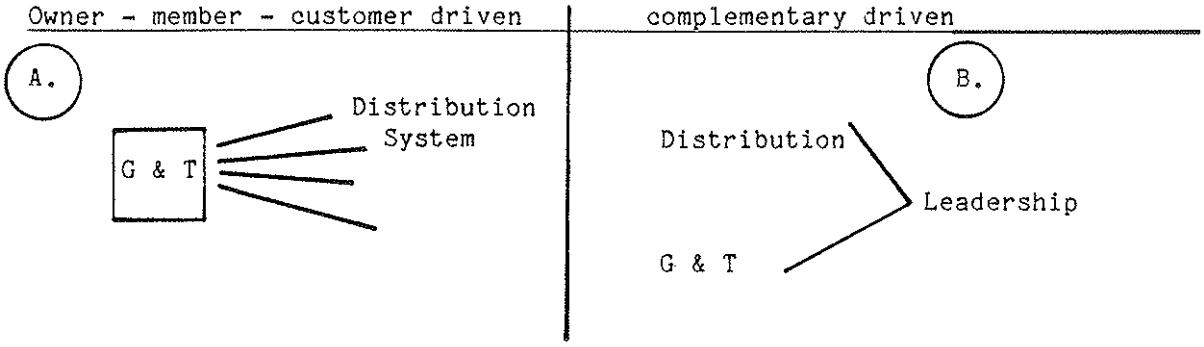
4. Pig (members yelling pig) (Woman came around curve and yelled "pig" at man who yelled back "sow". Man went around curve and ran into the pig.)

5. Define the meaning of "marketing" as related to the cooperative and your business.
   "Marketing" - means different things to different people/areas.
   Communicating to members that we are interested in selling to them.
   Give marketing a mission - deal with the operative paradigm.

*The distribution is represented in G&T policy - making by one man / one vote rule.
*A G&T director must also be a distribution system director or, where allowed, manager.
*Functions of power supply and functions of distribution are carried out by separate entities not in a unit organization.
*Both distribution systems and G&Ts have been formed by their members to serve a specific, collective self-interest. That collective self-interest becomes the predominant value.
*Expectations about service reliability and costs are directed to the cooperative which the member directly owns.

*Responsiveness to the needs of the consumer-owner is the only criterion for business decisions.
*The principal form of equity is capital owned consumer-owners.
*Long-range planning must address heterogeneous interests rather than a single issue or issues.

What is your paradigm?



Most distribution systems come from A. paradigm. It is important to make the decision about which Paradigm you're coming from only if results you are achieving are not satisfactory. Behavior will be different depending on which paradigm you are working from. The consumer is changing - earning power, age, occupation, location, etc.

G & T Level - while staff will be concerned, also will consider hands tied. Maybe internal conflict on how to address these issues.

Distribution level - our job is to be as effective as we can - keep cost in line.

"Strategic planning" - wording is overused - about as much as "stick to the knitting."

What steps do we need to take and who is going to do what? Narrow strategic planning objectives to a few specific areas (2 or 3).

CEO is chief planner, believer - one who makes it happen. This may be a problem - cannot assign "leadership" to one individual.

Three examples of behavioral actions and decisions that come out of member-owners: 1) what you do about a problem/situation, 2) how you behave, and 3) process used to make decision.

Pointed out that Oglethorpe may have stumbled into "leadership" without realizing it. Held independent management audit. Raised questions and concerns. Price-Waterhouse asked questions, gave sense of direction.

Challenge is how to get from Paradigm A to Paradigm B. Twisting, developmental, manipulating? Some may be content to stay as is. There is leadership in every situation, even if it is hard to identify.

NEW PROGRAMS AND EMPHASIS AT NRECA MANAGEMENT SERVICES

Martin Lowery, Manager
Consulting and Training, NRECA

The new workshop on "Takeover and Sellouts" was excellent and attendance was great in New Orleans and Denver. Large co-ops are cash-ready to go after small utilities. They have written strategies on how to acquire new territory.

Some conferences being re-packaged. Covering same issues discussed in the past but in a different way. A New Managers Orientation workshop will be held in Washington in November.

Training: Had ad hoc committee working in this area. Greg Boudreaux will be working to change 400 level courses. Will be developing program to develop new managers. This is a critical area. Must build set of programs to address this need. Statewide managers see this need also. New innovative courses in management leadership are being planned. For the first time, a three-day winter session will be held. Also, an intensive one-week training program for executives is being planned - it will need the best instructors. General managers must have continued training and education.

"Micro-computer Fundamentals" to be offered again. Had good participation. Idea was to get familiar with equipment. May develop another more advanced workshop.

Developing a rates course - summer school - nothing fancy. More fundamental - how to do cost study, etc. Will also offer a summer school on "Presentation Skills" - using videos, etc. May combine with another workshop.

On-site training going well. This will expand. Statewide personnel should work with their training coordinator - as a result training will be more tailored. Want to move to needs assessment with statewides. Use of audio cassette tapes and video materials - need to improve in these areas - become more advanced. Develop materials and move into different media.

"Train the Trainer" - may provide this workshop again in the future. This would be a good program for use as a statewide resource.

"Teleconferencing" - holds huge potential. Once program technology installed, this makes sense. Can be two-way video - still working on this. Still working on delivery system.

Compensation consulting - concentrate on survey until people know how to use it. Some people have had trouble interpreting surveys. May develop a workshop on how to use survey data.

"Mini-consulting Review" - some systems limited in what they can pay for this type of service. (Four days consulting on site - less than $5,000.) Send written report within 14 days.

"Strategic Planning" - will personally be thinking this area through and making a decision. There is a program concern here - this is a team building process. Have we left out key issues? Feel we are missing some key points. This is an important process - 8 to 10 people good size group. Manager is chief planner. Must have right data on table. Get key issues.

NEW PROGRAMS AND CONCERNS AT CFC

Joe F. Hanson, Director
Policy and Internal Audit, CFC

Some action will probably be taken at next Board meeting concerning interest rates. Long term fixed rate now 10% above market.

Bankruptcy and debt re-structuring is a big concern. Once a system gets a notice, they don't have much choice if can't pay bills. Discusssed Wabash. If can't pay government, can't pay anyone. CFC has suit against REA for $8 million to recover advance on first part of rate phase-in. REA offered security to CFC and is now trying to renege. Feels CFC will win suit.

Sunflower is a good illustration of re-structuring. This is a complicated process. This is a major impact on the revolving fund. FFB gets paid out of the assets of the revolvilng fund. Revolving fund also takes government hit. Must keep the fund solvent. A staff group from NRECA and CFC is working on this to develop a staff paper.

CFC is taking non-performing loans and putting into separate pool. The entire impact with respect to capital credits is not spread to just one group.

There are mitigating factors or steps being taken to correct some problems in bankruptcy and re-structuring. May be some special legislation in this area. May be able to refinance FFB loans without penalities - for balance of this fiscal year. Revolving fund is the "glue" that is holding us together.

Integrity fund - 5% contributions from capital credits go into this fund. 225 systems have committed to do this - gives over $300,000 to start with. A committee has been formed to review applications from systems that need this assistance (money). It will be administered fairly. May use some of the monies in areas where there are major annexation attempts.

CFC has been invited to be a part of the NRECA resolution process. CFC has never been a party of a resoluting body. Systems will receive a letter asking for input on what the two organizations may do together. Working together should strengthen the cooperative form of doing business in respect to tax bills, telecommunications, environmental problems, etc.

MINUTES
1986 RURAL ELECTRIC MANAGEMENT DEVELOPMENT COUNCIL MEETING

The Rural Electric Management Development Council held its annual conference at the Sheraton Myrtle Beach Inn, Myrtle Beach, S. C. on May 19-22, 1986. Council Chairman Barbara Deverick opened the meeting at 1:30 P. M. with the invocation and welcomed members and guests. Registration is the highest ever this year with 48 persons registered for the meeting.

She welcomed Tab Stogner, who invited the group to a reception sponsored by Southern Engineering on Tuesday evening, May 20 at the Dunes Club. He stated Southern Engineering was pleased to host this group and gave directions to the Dunes Club. Mark McNeil, former manager of Shenandoah Valley EC, was with Mr. Stogner and was also welcomed.

Wayne Keller gave plans for the golf outing on Wednesday afternoon at Marsh Harbor and confirmed the list of those who would participate. An invitation was issued by David Batten, Manager of Brunswick EMC, to a clam bake on Wednesday evening at Sea Trails Golf and Club House beginning at 6:00 P. M.

Chairman Deverick shared with the group regrets from several people who were unable to attend this year's meeting. Jim Kiley read a letter from Charlie Weaver, REA, expressing his regret at not being able to attend this year.

Committee chairmen were recognized for announcements concerning meetings of their committees prior to the Thursday morning business session.

Each person present introduced him/herself. (See registration sheet.)

Chairman Deverick officially named Christine Beane as secretary to the Council. She then introduced Jim Kiley, Chairman of the Program Committee, who introduced members of the committee and reviewed the program agenda for the next three days. (Mr. Kiley shared with the group the "proper" way to make a "successful presentation" - see copy attached.)

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On Thursday, May 22, 1986 Barbara Deverick convened the membership for the annual business session of the Council. She expressed appreciation to Jim Kiley, Program Chairman and his committee, for the excellent job done in planning the programs for the meeting.

She asked for a brief report on the golf outing on Wednesday afternoon and said everyone who attended enjoyed the clam bake which followed.

Allen Ritchie, Treasurer, was recognized for a report. This report covered the period of May 16, 1985 to May 12, 1986 and indicated reserve funds of $27,303.48. With a motion and a second, the treasurer's report was accepted.

Chairman Deverick called on Phyllis Barber, chairman of the Membership Committee, for a report. Ms. Barber stated letters of invitation were issued to 30 cooperatives and she received responses from twelve. She welcomed the following guests to the meeting: George Weaver, Manager of Central Georgia EMC; Kenneth A. Hazelwood, General Manager of Salt River RECC; Gene Joslin, Manager of Johnson County Electric Cooperative, Joe Satterfield, Manager of Blue Ridge Mountain EMC; Daniel Kessler, Manager of Wells REC; Joseph Sloan, Manager of Anoka Electric Cooperative; and Derl Hinson, General Manager of Four County Electric Power Association.

Ms. Barber stated applications for membership were received from Derl Hinson, Four County Electric Power Association and James Sherfey, Manager of Lee County Electric Co-op, Inc.

Ms. Barber stated she hoped the other guests would consider membership also. There was a motion and a second, and the two new applications were approved.

Ms. Barber reported Wally Beyer, general manager at Verendrye Electric Co-op, Inc., wished to withdraw from membership at this time. With a motion and a second, this withdrawal from membership was approved with the hope this co-op could come back in at a later time.

Two cooperatives, Flint EMC and Southside EMC, have applied for re-certification to the Council. There was a motion and a second and certificates of recertification will be presented to these cooperatives.

Chairman Deverick recognized Jim Golden for a report from the Nominating Committee. On behalf of the Nominating Committee, the following nominations were made (nominees are underlined):

Officers	Chairman - Barbara Deverick	Term Expires 1987
	Vice Chairman - Harold Smith	Term Expires 1987
	Treasurer - Allen Ritchie	Term Expires 1989
Program Committee		
	Chairman - Craig DeBower	Term Expires 1989
	Dave Larson	Term Expires 1988
	Bill Ward	Term Expires 1987
	Paul Bienvenue	Term Expires 1989
	Gary Hobson	Term Expires 1989
Nominating Committee		
	Chairman - W. R. Fleming	Term Expires 1989
	Derl Hinson	Term Expires 1989
	Mike Gustafson	Term Expires 1987
	Dave Dunnell	Term Expires 1988
Membership Committee		
	Chairman - Phyllis Barber	Term Expires 1988
	Robert Roberts	Term Expires 1987
	Ev Bristol	Term Expires 1988
	David Schornach	Term Expires 1989
Management Research Committee		
	Chairman - Wayne Johnson	Term Expires 1989
	Wayne Keller	Term Expires 1988
	Doyle Hines	Term Expires 1988
	Paul Weatherby	Term Expires 1987
	Joe Satterfield (Replaces Elmer Stocker)	Term Expires 1987

The chairman called for further nominations. There were none. Following a motion and a second, the slate of officers as presented was approved by acclamation.

Appreciation was expressed by Chairman Deverick to those who rotated off committees and for contributions made while serving on the committees. She stated she was looking forward to working with the new committees the coming year.

Wayne Keller, Chairman of the Research Committee, was recognized for a report. Mr. Keller referred to the program on Monday afternoon, "Management Challenges with Long-Term Employees," and said he hoped everyone enjoyed it and received some benefit from it. Following the session Monday afternoon, Mr. Keller and the Research Committee met with Greg Boudreaux and Andrew Weiner to discuss some projects for the coming year. There was discussion at this meeting concerning working with NRECA and Mr. Weiner to develop a one-day workshop dealing with the subject of long term employees. He pointed out that we have worked with NRECA on similar subjects in the past. Other projects that we have worked on with NRECA have been highly successful, Mr. Keller stated.

Following the recommendation in the form of a motion by Mr. Keller, there was a second, and the Council approved further work on this project. It was agreed that REMDC would pick up any costs for Mr. Weiner and NRECA would pay expenses for Greg Boudreaux. The Research Committee, along with Mr. Weiner and Mr. Boudreaux, will proceed to work on developing a retirement program along the lines discussed. The program will be presented at next year's REMDC meeting and the council will serve as a "guinea pig" and critique the program.

Chairman Deverick thanked the Council for their attendance and support of this year's meeting, as well as representatives from CFC and NRECA. She also thanked Chris Beane for serving as secretary to the Council and making necessary arrangements for the meeting.

There was discussion concerning the location of the 1987 REMDC meeting. Invitations were issued from Four County Electric Power Association, Columbus, Mississippi; Cass County Electric Co-op, Inc. in Kindred, North Dakota; and Central Area Data Processing Center in St. Louis, Missouri. Following discussion, there was a motion and a second that the 1987 meeting be held in St. Louis, Missouri the week of May 18, 1987. Interest was expressed in seeing the facilities at Central Area Data Processing, as well as their telecommunications operation.

Chairman Deverick asked for comments from guests at this years meeting. George Weaver, manager of Central Georgia EMC, said he enjoyed the meeting very much and liked the specific way in which problems were addressed. Daniel Kessler, Manager of Wells REC, stated he was impressed with the agenda and was looking forward to joining the Council in the future. Derl Hinson, manager of Four County Electric Power Association, said he was pleased to be a part of the Council again. Hollis Joslin, manager of Johnson County Electric Cooperative, said he appreciated the opportunity to attend and enjoyed the meeting very much. Joe Satterfield, manager of Blue Ridge Mountain EMC, stated he enjoyed the meeting and would be applying for membership.

Chairman Deverick advised if anyone had program ideas to contact the chairman of the Program Committee with this information.

Chairman Deverick asked if there was further business. There was a motion by Derl Hinson with a second by Jim Kiley, that a resolution from the Council be prepared commending NRECA and CFC for their positive efforts in seeking to resolve the loan problems with REA and the Federal Government and a copy be sent to Bob Bergland and Chuck Gill.

On behalf of the membership, Harold Smith thanked Mrs. Deverick for her work and input in this year's REMDC meeting. Chairman Deverick thanked the group for their attendance, support, and participation and declared the meeting adjourned.

Christine Beane

Christine Beane, Secretary

SUCCESSFUL PRESENTATION

Jim Kiley, Chairman
Program Committee

- TAKE ALL OVERHEADS YOU HAVE
  - A. BORROW SOME
  - B. DISCOURAGES QUESTIONS
- START OFF WITH WIRING DIAGRAMS
- NEVER USE SINGLE TRANSPARENCY
- HAVE AT LEAST TWELVE BULLETS ON EACH OVERHEAD - 2 MINUTES ON EACH
- TIP OVERHEADS 20 DEGREES
- ALWAYS USE LARGE TABLES WITH SMALL PRINT - APOLOGIZE BUT SAVE FOR NEXT TALK
- REMOVE OVERHEAD IF YOU NOTICE SLIGHT WIDENING OF EYES (MAY INDICATE UNDERSTANDING)

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, Kansas
7th	May, 1962	Kansas City, Kansas
8th	May 15-17, 1963	Town House, Kansas City, Kansas
9th	May 6-8, 1964	Town House, Kansas City, Kansas
10th	May, 1965	Chicago, Illinois
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, Col.
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, Colorado
18th	May 8-10, 1973	Holiday Inn, Fargo, North Dakota
19th	May 7-9, 1974	Landmark Inn, Mrytle Beach, SC
20th	May 20-22, 1975	Ramada Inn, Sioux Falls, SD
21st	May 11-13, 1976	Velda Rose Hotel, Hot Springs, Arkansas
22nd	May 10-12, 1977	Sheraton Airport Hotel, Denver, Colorado
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, Minn.
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, Indiana
31st	May 19-22, 1986	Sheraton Inn, Myrtle Beach, S. C.

TREASURER'S REPORT

THE RURAL ELECTRIC MANAGEMENT DEVELOPMENT COUNCIL

OPERATING STATEMENT

May 16, 1985 to May 12, 1986

INCOME:	
1985 Dues (Schedule A) - 3	$ 900.00
1986 Dues (Schedule B) - 25	7,500.00
Interest from Investments	1,141.82
Total Income	$ 9,541.82
EXPENSES:	
Council	
1985 Meeting	
Coffee & Room - The Marriott Inn - Clarksville, IN	$ 1,137.65
Sioux Valley Empire EA - Hickman-Fee, expense, books	8,058.10
Sioux Valley Empire EA - Exp. Killey attend NRECA Mgt. Curric. Conf.	472.46
Blue Ridge EMC - 1985 REMDC Proceedings	498.46
	$10,166.67
Research Committee	
Blue Ridge EMC - Wayne Keller, Res. Comm. Exp.	$ 30.30
Virgil H. Harriott - Res. Comm. Exp.	881.11
Sub-Total	$ 911.41
Total Expenses	$11,078.08
NET INCOME:	$(1,536.26)

THE RURAL ELECTRIC MANAGEMENT DEVELOPMENT COUNCIL

SCHEDULE A

1985 Dues Paid After May 16, 1985		
Davidson EMC	5/28/85	$ 300.00
Verendrye EC	5/28/85	300.00
Whitley County	5/28/85	300.00
Total		$ 900.00

SCHEDULE B

1986 Dues Paid as of May 12, 1986		
Adams EC	5/05/86	$ 300.00
Blue Ridge EC	4/21/86	300.00
Cass County EC	4/16/86	300.00
Central Area DP	5/12/86	300.00
Clark County REMC	4/16/86	300.00
Cobb EMC	4/16/86	300.00
Cotton EC	--	--
Davidson EMC	--	--
Delaware EC	4/16/86	300.00
East Central EA	--	--
Flint EMC	4/16/86	300.00
Four County EMC	4/29/86	300.00
Guadalupe Valley EC	5/28/85	300.00
Hancock-Wood EC	4/21/86	300.00
Linn County	4/16/86	300.00
Lumbee River EMC	4/16/86	300.00
Maquoketa Valley REC	4/16/86	300.00
Morgan County (Ind.) REMC	4/16/86	300.00
Northern EC	4/16/86	300.00
Pioneer REC	4/16/86	300.00
Randolph EMC	4/16/86	300.00
Shenandoah Valley EC	4/21/86	300.00
Sioux Valley Empire EA	4/16/86	300.00
Southeast Iowa EA	4/16/86	300.00
Southeastern Illinois EC	--	--
Southside EC	4/29/86	300.00
Union REA, Inc.	4/16/86	300.00
Verendrye EC	--	--
Walton EMC	--	--
Whitley County REMC (Northeastern REMC)	4/16/86	300.00
Wright-Hennepin CEA	--	--
Yampa Valley EA	5/05/86	300.00
Total		$7,500.00
Grand Total		$8,400.00

THE RURAL ELECTRIC MANAGEMENT DEVELOPMENT COUNCIL

BALANCE SHEET

May 12, 1986

	5/12/86	5/16/85
ASSETS		
Current		
Cash in Checking Account	$ 7,080.89	$ 8,758.97
Investments - Savings Account	20,222.59	20,080.77
Total	$27,303.48	$28,839.74
MEMBERS' EQUITY		
Retained Earnings	$28,839.74	$27,236.71
Net Gain (Loss)	(1,536.26)	1,603.03
	$27,303.48	$28,839.74

RESEARCH COMMITTEE

Resources	
1984 REMDC Allocation Remaining 5/16/85	$3,455.74
Expenditures from Operating Statement	911.41
Remaining Budget Allocation	$2,544.33

Respectfully submitted,

Allen R. Ritchie
Treasurer

RURAL ELECTRIC MANAGEMENT DEVELOPMENT COUNCIL

ATTENDANCE RECORD

Cooperative	Year											
	80'	81'	82'	83'	84'	85'	86'	87'	88'	89'	90'	91'
Adams Electric Cooperative	X	X	X	X	X	X	X					
Blue Ridge EMC	X	X	X	X	X	X	X					
Cass County Electric Coop.	*	O	X	O	X	X	X					
Clark County REMC	X	X	O	O	X	X	X					
Cornhusker PPD	X	O	O	-	-	-	-					
Cotton Electric Cooperative	X	O	X	X	-	-	-					
East Central Electric Association	X	X	O	O	-	-	-					
Flint EMC	X	X	X	X	X	X	X					
Four County EMC	O	X	X	*	O	O	O					
Hancock-Wood EC	X	X	-	-	*	X	X					
Kay Electric Coop.	O	O	O	-	-	-	-					
KEM Electric Coop.	-	-	-	-	-	-	-					
Linn County REC	X	X	X	X	X	X	X					
Lumbee River EMC	X	X	X	X	X	X	X					
Manquoketa Valley REC	*	X	X	X	X	X	O					
Morgan County REMC (Indiana)	X	O	X	X	X	X	X					
Northern Electric Cooperative				*	O	O	O					
Pioneer REC	X	X	X	X	X	O	O					
Randolph EMC				X	X	X	X					
Shenandoah Valley Electric Coop.	X	X	X	X	X	X	X					
Sioux Valley Empire Electric Assn.	X	X	X	X	X	X	X					
Southeast Iowa Coop. EA	X	X	X	X	X	X	X					
Southeastern Illinois EC	X	X	X	X	O	-	-					
Southside EC	X	O	-	O	O	-	O					
Union Rural EA	O	X	X	O	*	X	X					
Volunteer EC	O	X	X	-	-	-	-					
Whitley County REMC	X	X	O	X	X		X					
Wright-Hennepin Elec.	X	X	X	X	-	X	-					
Yampa Valley Electric Assn.	X	X	O	X	X	X	X					
Cobb EMC					X	X	X					
Guadalupe Electric Coop.					X	X	O					
Verendrye Electric Coop.					X	-	-					
Delaware Electric Coop.					X	X	X					
Walton EMC					X	-	-					
Davidson EMC					X		-					
Central Area Data Processing Center						*	X					

Code: X - Paid - Attended
O - Paid - Did not attend
* - Attended - Dues not paid

Co-ops represented at meeting by invitation (prospective members):

Anoka Electric Cooperative, Anoka, Minnesota
Blue Ridge Mountain EMC, Young Harris, Georgia
Central Georgia EMC, Jackson, Georgia
Four County Electric Power Assoc., Columbus, Mississippi
Johnson County Electric Cooperative, Cleburne, Texas
Salt River RECC, Bardstown, Kentucky
Wells REC, Wells, Nevada

RURAL ELECTRIC MANAGEMENT DEVELOPMENT COUNCIL
OFFICERS AND COMMITTEES FOR 1987

Officers

Chairman -	Barbara Deverick	Term expires 1987
Vice Chairman -	Harold Smith	Term expires 1987
Treasurer -	Allen Ritchie	Term expires 1989
Secretary -		Appointed annually by Chairman

Program Committee

Chairman -	Craig DeBower	Term expires 1989
	Dave Larson	Term expires 1988
	Bill Ward	Term expires 1987
	Paul Bienvenue	Term expires 1989
	Gary Hobson	Term expires 1989

Nominating Committee

Chairman -	W. R. Fleming	Term expires 1989
	Derl Hinson	Term expires 1989
	Mike Gustafson	Term expires 1987
	Dave Dunnell	Term expires 1988

Membership Committee

Chairman -	Phyllis Barber	Term expires 1988
	Robert Roberts	Term expires 1987
	Ev Bristol	Term expires 1988
	David Schornach	Term expires 1989

Management Research Committee

Chairman -	Wayne Johnson	Term expires 1989
	Wayne Keller	Term expires 1988
	Doyle Hines	Term expires 1988
	Paul Weatherby	Term expires 1987
	Joe Satterfield	Term expires 1987

A. All committee members and officers elected 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.