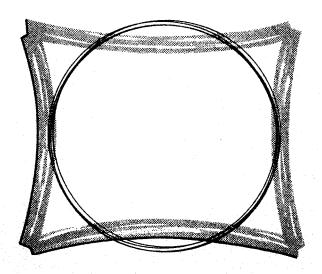
# Proceedings of the 16th Annual Conference

of

# The Rural Electric Management Development Council



"PLANNING AND CONTROL"

Fargo, North Dakota May 8–10, 1973

# SCOPE

rage No.
Council Preamble
Viewpoints
Objectives
List of Officers and Committees for 1973
Attendance List
Program Outline
Presentations:
<ol> <li>Corporate Strategic Planning - Integrated</li> <li>By: C. E. Viverette, Executive Vice President</li> <li>Barbara Deverick, Administrative Assistant</li> <li>Blue Ridge Electric Membership Corporation</li> <li>Lenoir, North Carolina</li></ol>
<ol> <li>Application of Control Reporting Techniques</li> <li>By: Everette Bristol, Chief Engineer/Staff Assistant         Yampa Valley Electric Association         Steamboat Springs, Colorado</li></ol>
<ol> <li>Rural Electric Financial Profiles and Projections</li> <li>By: Donald E. Smith, Staff Economist         National Rural Electrification Administration         Washington, D. C</li></ol>
4. Utilization of Results Approach to Planning and Control By: Virgil H. Herriott, General Manager Presented by: Jim Kiley, Assistant Manager Sioux Valley Electric Valley Cooperative Colman, South Dakota
5. New Developments in Management and Management Issues for Rural Electric Cooperatives: 1972 - 1982  By: Harold Koontz, Professor of Management  University of California  Los Angeles, California
6. How Can Appraisal of Managers be made Effective? By: Harold Koontz
7. Managing Through Feed Forward Control By: Harold Koontz
Minutes

# 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 future success of the rural electric program is dependent upon dynamic management and leadership and that this can best be accomplished through a planned program of Management Training and Career Development utilizing up-to-date management principles and techniques.
- 2. We believe that research and development of new concepts and approaches to management 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 the development of up-to-date management programs depends on a willingness to innovate, study, and review present management principles and practices and then translate the results of such studies into meaningful programs.
- 4. We believe that management principles and techniques must be under constant study and review and that this study and review can be done most effectively on a group basis by those most interested and willing to contribute.
- 5. We believe that dynamic rural electric system management will be enhanced where there has been a maximum exchange of ideas and experiences between those organizations making application of up-to-date principles and techniques.
- 6. We believe that we should share with all consumer-owned rural electric systems the results of our management practices, experiences, and innovations. We also believe that this sharing will be best accomplished through NRECA and other appropriate organized groups.

# **OBJECTIVES**

- A. To bring together key management people who have demonstrated their application of up-to-date management principles and techniques and who evidence a strong interest and willingness to contribute to study, research, and innovation in the application of management to the rural electric system operations.
- B. To contribute to the strengthening of management in the rural electric program by undertaking management research in areas of current concern and interest.
- C. To develop new management concepts, approaches and techniques that will enable rural electric management to utilize the resources and provide the leadership required for meeting the needs of the people in the ever changing rural area environment.
- D. To develop the means whereby the results of management research and innovation can be clearly defined and widely disseminated to all rural electric systems.

#### OFFICERS AND COMMITTEES FOR 1973 DEVELOPMENT COUNCIL

Chairman - James Golden Vice Chairman - Charles Overman Treasurer - Bevis Hanna Secretary - Barbara Deverick Term expires in 1975
Term expires in 1973
Term expires in 1974
Appointed annually by Chairman

# **PROGRAM**

Chairman - James Kiley Term expires in 1975
Jack Cochran Term expires in 1974
Everett Bristol Term expires in 1975
Clyde Hukills Term expires in 1973

#### NOMINATING

Chairman - Charles W. Thompson Term expires in 1974
Richard Selinger Term expires in 1975
Willard Grager Term expires in 1975
Norwood Speight Term expires in 1973

# MEMBERSHIP

Chairman - Jack Goodman Term expires in 1974
Clifford Robinson Term expires in 1975
Olaf Sandvick Term expires in 1973
Tom Townsend Term expires in 1974

- A. All committee members and officers elected for a 3-year term.
- B. Chairman of each standing committee named by the Nominating Committee and serve for 3 years when elected.

# RURAL ELECTRIC MANAGEMENT DEVELOPMENT COUNCIL

# 1973 ANNUAL CONFERENCE REGISTRATION

Adams Electric Cooperative, Inc.
P. 0. Box 19
Gettysburg, Pa. 17325
Charles Overman, General Manager
Wayne Kump, Manager Member Services
& Organ. Development

Blue Ridge Electric Membership Corp.
P. O. Box 112
Lenoir, N. C. 28645
Cecil E. Viverette, Exec. Vice Pres.
Barbara Deverick, Administrative Asst./
Mgr. Organ. Planning
& Personnel Services

Carroll Electric Cooperative Corporation Berryville, Arkansas Fred M. Prentice, Mgr. Adm. Svcs.

Carroll Electric Membership Corporation Carrollton, Georgia 30117 James M. Hubbard, General Manager Willie Mae Anderson, Mgr. Office Svcs. Robert L. Galloway, Mgr. Adm. Svcs.

Cass County Electric Cooperative, Inc. Kindred, North Dakota 58051 Willard Grager, General Manager Lawrence Moderow, Executive Assistant

Central Kansas Electric Cooperative, Inc. Great Bend, Kansas 67530 Jack D. Goodman, General Manager

Douglas County Electric Membership Corp.
Douglasville, Georgia 30303
C. W. Thompson, General Manager
Charles Procter, Mgr. Office Services
Harvey C. Ritch, Manager Engineering

East Central Electric Association Braham, Minnesota Jerry Haider, Manager Marv Athey, Finance

Four County Electric Membership Corp. Burgaw, N. C.
L. P. "Bill" Beverage, Gen. Mgr. Wayne Pickett, Staff Assistant

Kay Electric Cooperative Blackwell, Oklahoma 74631 Les Conaway, Superintendent

KEM Electric Cooperative, Inc. Linton, North Dakota 58552 John Allensworth

Mecklenburg Electric Cooperative Chase City, Virginia Elwood Blackwell, Staff Asst.

Morgan County Rural Elec. Assoc. P. O. Box 738 Fort Morgan, Colorado 80701 Bob Pflager, Member Svcs. Director

Morgan County Rural Elec. Memb. Co-op. Martinsville, Indiana Richard Seger, Staff Assistant

Ozarks Electric Cooperative Fayetteville, Arkansas 72701 Millard Goff, General Manager Tom Townsend, Administrative Asst.

San Isabel Electric Services, Inc.
P. O. Box 892
Pueblo, Colorado 81002
Ed Gaither, President
Doris Ann DePietro, Administrative Asst.

Shenandoah Valley Electric Cooperative Dayton, Virginia Mark McNeil, General Manager

Sho-Me Power Corporation
Marshfield, Missouri 65706
Charles Bouleson, General Manager
Warren Johnson, Mgr. Special Services

Sioux Valley Empire Electric.Assoc. Colman, South Dakota 57017 James M. Kiley, Assistant Manager James Bowar, Director of Marketing

Slope Electric Cooperative, Inc. New England, North Dakota 58647 Richard Selinger, Manager Tri-County Elec. Cooperative, Inc. Carrington, North Dakota
E. M. Arntson, Manager

West Plains Elec. Cooperative, Inc. Dickinson, North Dakota 58552 A. L. Shjeflo, General Manager Olaf G. Sandvick, Staff Assistant

White River Valley Elec. Cooperative Branson, Missouri 65616 L. Norwood Speight, General Manager Clifford Robertson, Adm. Officer

Yampa Valley Elec. Association, Inc. P. O. Box 1218
Steamboat Springs, Colorado 80477
James Golden, General Manager
Everette Bristol, Chief Engineer/
Staff Asst.

# **GUESTS**

Norman Cross (Retired REC Manager) New England, North Dakota

Dr. Harold Koontz Professor of Management University of California Los Angeles, California

Charles Weaver, Management Services National Rural Electric Cooperative Assn. Washington, D. C.

Donald E. Smith, Staff Economist National Rural Electric Cooperative Assn. Washington, D. C.

# 1973 MANAGEMENT DEVELOPMENT COUNCIL ANNUAL MEETING HOLIDAY INN-FARGO, N. DAK. MAY 8, 9 & 10, 1973

# MAY 8, 1973

8:45 - 9:15 a.m.

- Registration

9:15 - 9:30 a.m.

Welcome, Introductions and Program Review -James Golden, Chairman, Mgmt. Devel. Council

# PLANNING AND CONTROL

A series of presentations on the application of these essential Management functions to rural electric system operations.

Moderator: Chas. Overman, Gen. Mgr., Adams Electric Cooperative, Gettysburg, Pa.

9:30 a.m. -10:45 a.m.

Long Range Planning at Blue Ridge EMC.
 (A recitation of new and innovative long-range planning techniques.) - Cecil Viverette, Gen. Mgr. & Barbara Deverick, Administrative Ass't., Blue Ridge EMC, Lenoir, N. C.

10:45 a.m. - 11:00 a.m.

Coffee Break

11:00 a.m. - 12:00 noon

The Application of Control Reporting Techniques (Recent experience in applying Standards of Performance and how to keep them up-to-date.) - Everett Bristol, Engineer & Staff Assistant, Yampa Valley Electric Assoc., Steamboat Springs, Colo.

12:00 noon - 1:30 p. m.

Noon luncheon

1:30 p.m. -3:00 p.m.

- Rural Electric Financial Profiles and Projections
(An interpretation of system statistics and financial data analyzed and projected by computer. Each manager should bring this data on their own system as prepared by NRECA.) - Donald E. Smith, NRECA Staff Economist

3:00 p.m. - 3:15 p.m.

- Coffee Break

3:15 p.m. - 4:15 p.m.

Utilization of the Results Approach to Planning & Control (The identification of specific results expected in each Key Performance Area and their use as a management tool)-Virgil H. Herriott, Gen. Mg Sioux Valley Electric Coop., Colman, S. Dak.

4:15 p.m. - 6:00 p.m.

Willard Grager, Gen. Mgr., Cass County Electric has invited the group to tour their headquarters, a shopping center and some of the suburban Fargo area served by the Cooperative.

# MAY 9, 1973

# HAROLD KOONTZ ON MANAGEMENT

Professor Harold Koontz, Mead Johnson Professor of Management at the University of California, Los Angeles is an internationally recognized author, lecturer, consultant and practitioner of Management. '(Copies of two of Professor Koontz' books have been sent to program participants in advance of this meeting.)

Introduction of Professor Koontz - James M. Kiley, Program Chairman, 1973 Management Development Council.

8:30 a.m. - 10:00 a.m. - New Developments in Management (Professor Koontz will review new concepts, methods & techniques of

Management being successfully applied today.)

10:00 a.m. - 10:15 a.m. - Coffee Break

10:15 a.m. - 12:00 noon - Management Issues in Rural Electrics 1972 - 1982 (Professor Koontz will review and interpret the 10-year predictions prepared by Bob Kabat of NRECA in term.

of their management implications.)

12:00 noon - 1:30 p. m. - Noon Luncheon

1:30 p.m. - 2:20 p.m. - Management Issues in Rural Electrics 1972-1982 (continued)

2:30 p.m. - 3:15 p.m. - Appraising Managers as Managers (Professor Koontz will review his recent book on Manager appraisal.)

3:15 p.m. - 3:30 p.m. - Coffee Break

3:30 p.m. - 5:00 p.m. - Appraising Managers as Managers (continued)

Professor Koontz has indicated his desire for widespread discussion and questions from the participants throughout each of his presentations. The value we derive from this unique opportunity will be primarily dependent upon how well we are prepared to discuss these subjects with him during the day.

5:00 p. m.

- Adjourn

# MAY 10, 1973

The Future Role & Structure of the Management Development Council - James A. Golden, Chairman, presiding.

8:30 a.m. - 10:15 a.m. - The future role of the Council in Management Research-(A clarification of plans and the assignment of responsibility for future management research.)

Guidelines for developing future annual meeting programs of the Council. (How to eliminate possible conflict with other available management programs.)

10:15 a.m. - 10:30 a.m. - Coffee Break

10:30 a.m. - 11:30 a.m. - Business Meeting

11:30 a.m. - Adjourn

#### NEW DEVELOPMENTS IN MANAGEMENT

Ву

#### Harold Koontz

- I. The Increased Importance of the Managerial Role.
- II. The Growing Science Underlying Managing.
- III. The New Programs of Managing By Objectives.
  - 1. The essence of managing by objectives is verifiable goals.
  - 2. Strengths of managing by objectives.
  - 3. Weaknesses and shortcomings.
- IV. Managing By Objectives Has Led to Better Appraisals.
- V. Managing By Objectives Has Led to Certain Organizational Developments.
  - . Slightly increased organizing around marketing channels.
  - 2. Better focussing of staff work on objectives.
  - 3. More extensive use of end-result organization: Project management, grid/matrix structures.
- VI. Organizational Developments and Demise of Certain Fads.
  - 1. "Free-form organization".
  - 2. The group chief executive.
  - 3. The "big picture" syndrome at the top.
- VII. Recognition of the Systems Approach to Managing.
  - 1. Recognition of plans as networks.
  - 2. The problems and failures of developing information systems.
  - 3. The unsolved problem of procedures planning and control.
  - 4. Discouragement and slowness in using operations research.
  - 5. Replacing of long-range planning with strategic planning.
  - 6. Getting around the deficiencies of feedback in control.
  - 7. The potential of the new decision theory: decision trees and risk theory.
- VIII. Disappointing Results from Voluminous Behavioral Science Research.
  - 1. Increased certainty as to motivation.
  - 2. Job "enlargement" has become "job enrichment".
  - 3. The limitations in managerial training from sensitivity and leadership training.
  - 4. Recent awakening to the managerial shortage crisis.
  - 5. The promise of human resource accounting.
  - 6. The rising prominence of organization development.
  - 7. The encouraging use of the assessment center.

- IX. The Intensively Sought After Area of Social Responsibility.
  - 1. Social and environmental pressures.
  - 2. What is the responsibility of business and other enterprises?
  - 3. The need for environmental forecasting.
  - 4. The need for a social audit.
- X. The Increasing Sophistication in Tools of Planning and Control.
- XI. What is Needed for Effective Managing.
  - 1. The problem of managerial obsolescence.
  - 2. An awareness of the changing role of the manager.
  - 3. Need for accelerated and continuing management development.
  - 4. Need for compression and easier transmission of new knowledge to operating managers.
  - Need for increased management research and development.
    - (1) The fewness of managerial inventions despite their importance for productivity and satisfaction.
    - (2) The present low level of research.
    - (3) The need for useful, reality-oriented, research and development and new managerial inventions.

# Management Issues for Rural Electric Cooperatives: 1972-1982

# Presentation and Discussion by Harold Koontz

May 9, 1973

- 1. The Basic Role of the R E C Manager.
- 2. The Social Responsibility and "Surplus" Goal of the REC Manager.
- 3. Making Planning for the Future Effective
  - (1) The need for clear and verifiable objectives--managing by objectives.
  - (2) Undertaking total environment forecasting: economic-market, technological, political, social.
  - (3) Making long range planning effective.
  - (4) Use of staffs in planning.
  - (5) The special importance of financial planning.
  - (6) Overcoming resistance to change.
- 4. Making Operational Decision Making More Effective.
  - (1) The requirements for rationality by "professional rationalists"
  - (2) The use of systems approaches: operations research and logistics techniques.
  - (3) Using electronic data processing for decision making.
- 5. Organizing for Effective Future Management
  - (1) The necessity for planning a future organization structure.
  - (2) Delegation with growth.
  - (3) Decentralization without loss of control.
  - (4) What new departments with growth?
  - (5) The changing role of the general manager and the need for an "executive manager."
  - (6) Making effective use of staff and consultants.
- 6. Manning the Future Organization Structure.
  - (1) Manpower planning.
  - (2) Inventorying present manpower.
  - (3) Obtaining manpower for the future.
  - (4) Requirements for effective training.
  - (5) Improving selection of managers and staff.
- 7. Dealing With the Problem of Communication.
- 8. Improving Managerial Control With Growth.
- 9. Utilizing Boards of Directors Effectively.

# CORPORATE STRATEGIC PLANNING - INTEGRATED.

#### (OUTLINE)

By: C. E. Viverette, Executive Vice President Barbara Deverick, Administrative Assistant Blue Ridge Electric Membership Corporation Lenoir, North Carolina

# 1. Why Blue Ridge Electric went into integrated corporate planning

- a. Improve communication and coordination.
- b. Provide motivation give sense of purpose.
- c. Obtain better decisions cause managers to look for best alternatives.
- d. Improve attitude toward change actively seek to create change to the advantage of Blue Ridge Electric.
- e. To find new and better ways of controlling the business means of adjusting to keep Blue Ridge Electric on target.

# 2. How integrated corporate planning was achieved

- a. Board and Executive Vice President agreed on need and procedure for development of the corporate plan involving the board, the Executive Vice President, the department managers and other key system personnel. Board creates Ad Hoc Long Range Study Committee.
- b. Project assignment made and discussed at management staff meeting.
- c. Schedule developed with specific work assignments made.
- d. System planning premises updated and reviewed with board and staff.
- e. Specific guidelines provided by the Executive Vice President for development of planning statements.
- f. Preliminary drafts of planning statements prepared by staff managers for key areas assigned.
- g. Draft statements reviewed with management staff and refined by the Executive Vice President and staff managers.
- h. Long range plan written in agreed-upon draft form for consideration by Long Range Study Committee of the Board of Directors.
- i. Plan reviewed and edited by the Long Range Study Committee and recommended to the full Board of Directors.
- j. Board approved long range plan and made Long Range Study Committee a standing committee of the Board.
- k. System Long Range Plan used as basis for annual work (operating) plan "Present" goals in plan become current goal in 1973 work (operating) plan.

#### 3. And then what - -

- a. Quarterly progress reviews on results.
- b. Annual updating and revision of System Long Range Plan.
- Continuous evaluation of strategic plan against financial trends and forecasts and socio-economic changes.
- d. Continue the process corporate planning is circular in nature.

THE ACT OF PLANNING IS MORE IMPORTANT THAN THE WRITTEN PLAN

# DEFINITION OF MANAGEMENT

"Managing is the art of getting things done through and with people in formally organized groups. It is the art of creating an environment in which people can perform as individuals and yet cooperate towards the attainment of group goals. It is the art of removing blocks to such performance, a way of optimizing efficiency in reaching goals."

(Making Sense of Management Theory, Harold Koontz, Harvard Business Review, July-August, 1962)

# BLUE RIDGE ELECTRIC

#### **BEGAN**

INTEGRATED	CORPORATE	PLANNING	TΩ		

- (1) IMPROVE COMMUNICATION AND COORDINATION
- (2) PROVIDE MOTIVATION GIVE SENSE OF PURPOSE
- (3) OBTAIN BETTER DECISIONS CAUSE MANAGERS TO LOOK FOR . . . . . BEST ALTERNATIVES
- (4) IMPROVE ATTITUDE TOWARD CHANGE ACTIVELY SEEK TO CREATE CHANGE TO THE ADVANTAGE OF BRE.
- (5) To find new and Better ways of controlling the Business . . . . . . . . Means of adjusting replanning to keep BRE on target.



· STEPS



IN INTEGRATED

CORPORATE PLANNING AT BRE . . . . . .

- (1) BOARD OF DIRECTORS AND EXECUTIVE VICE PRESIDENT AGREED ON NEED AND PROCEDURE . . . BOARD CREATES AD HOC COMMITTEE.
- (2) PROJECT ASSIGNMENT MADE AND DISCUSSED AT MANAGEMENT STAFF MEETING.
- (3) SCHEDULE DEVELOPED WITH SPECIFIC WORK ASSIGNMENTS MADE.
- (4) SYSTEM PLANNING PREMISES UPDATED, AND REVIEWED WITH BOARD AND STAFF.
- (5) Specific guidelines provided by Executive Vice President for Development of Planning Statements.
- (6) PRELIMINARY DRAFTS OF PLANNING STATEMENTS PREPARED BY STAFF MANAGERS FOR KEY AREAS ASSIGNED.
- (7) DRAFT STATEMENTS REVIEWED WITH MANAGEMENT STAFF AND REFINED BY THE EXECUTIVE VICE PRESIDENT.
- (8) Long range plan written in agreed upon draft form for consideration by Long Range Study Committee of the Board of Directors.
- (9) PLAN REVIEWED AND EDITED BY THE LONG RANGE STUDY COMMITTEE AND RECOMMENDED TO THE FULL BOARD OF DIRECTORS.
- (10) BOARD APPROVED LONG RANGE PLAN AND MADE LONG RANGE STUDY COMMITTEE A STANDING COMMITTEE OF THE BOARD.
- (II) SYSTEM LONG RANGE PLAN USED AS BASIS FOR ANNUAL WORK (OPERATING) PLAN "PRESENT" GOALS IN PLAN BECOME CURRENT GOALS IN 1973 WORK (OPERATING) PLAN.



#### BLUE RIDGE ELECTRIC MEMBERSHIP CORPORATION

# STATEMENT OF OBJECTIVES

The objectives of Blue Ridge Electric Membership Corporation are based on the Beliefs of the organization and provide a sense of direction to directors, employees, and members as they work together.

# WITH MEMBER-OWNERS (of the Cooperative)

- 1. · Corporate Existence: To operate the Cooperative as an enterprise on a continuing and progressive basis in accordance with its charter and other legal and contractual requirements.
- 2. <u>Electric Service</u>: To assure the availability of high quality electric service in adequate quantity, that meets environmental standards, to all persons within the Cooperative service area at the lowest possible cost.
- 3. Member Relations: To keep member-owners informed on the affairs of the Cooperative and strive to achieve and maintain widespread understanding, involvement and participation of the member-owners in the affairs of their rural electric system and provide them with a real sense of ownership through the demonstration of Cooperative principles and democratic processes.
- 4. Power Utilization: To encourage the efficient and economical use of electricity and to promote electricity as the preferred energy source and promote the usage of appliances and equipment that are used during off-peak periods of system loads.
- 5. Area Development: To stimulate and support rural area development programs, especially those which will increase and stabilize the economic level of the Cooperative's service area, including those programs which will provide the greatest opportunity for the development of the most important resource people
- 6. Organization: To attain maximum beneficial use of available manpower, physical and financial resources through sound organizational structure, utilization of imp oved methods of operation, new equipment and techniques, coordination, federated services and a continuous program of self-evaluation and improvement
- 7. Capital: To seek to develop adequate sources of capital for the system to assure that the Cooperative can carry out its full utility responsibility and its obligations as a corporate citizen and provide a means whereby the member-owners can help to build and maintain their Cooperative by contributing a reasonable amount of essential capital.

# WITH EMPLOYEES

1. Opportunity: To recognize that the greatest assets of the Cooperative are its employees and that they must be provided the opportunity for development and improvement as a matter of moral obligation as well as one of material advantage.

- 2. Reward: To reward, encourage progress, inform, train, develop, and properly assign all employees in order to attract and retain in the service of the enterprise those who seek a career with the Cooperative so that their lives and work will be given meaning, dignity, satisfaction, and purpose both on and off the job.
- 3. Results: To seek to obtain an acceptance of the beliefs which emphasize the social and economic benefits in doing a job in a manner which produces the best results.

# WITH THE PUBLIC

- 1. <u>Natural Resources:</u> To promote the development of the nation's natural resources, in keeping with environmental protection standards, including water, power, and nuclear resources for the benefit of the people.
- 2. Productive Use of Power: To encourage, promote and support research in the productive uses of electric energy in the fields of agriculture, business and industry which will contribute to the improving the economic life of the community.
- 3. Public Support: To develop understanding, acceptance and support of the Cooperative's objectives, plans, and programs.
- 4. Corporate Citizen: To foster and develop the acceptance of the Cooperative as an effective citizen and a respected member of the business community.
- 5. <u>Leadership</u>: To provide leadership and to cooperate with other community and civic groups in furthering programs of mutual interest which will benefit e Cooperative's service area, the state, and the nation.

5/20/72

# BLUE RIDGE ELECTRIC MEMBERSHIP CORPORATION WORK PROJECT ASSIGNMENT

Assignor C. E. VIVERETTE	Date	4/18/72
Recipient BARBARA (CHAIRMAN-COORDINATOR) WAYNE -	- HENRY - RON	
Project Develop corporate strategic plan for each YOU ARE RESPONSIBLE - PLAN TO BE BASED ON USE OF FORECAST INFORMATION - PLAN TO BE TESTE PROVIDE NECESSARY GUIDELINES. INPUT SHOULD BE	CORPORATE AND ENVIRON TO WITH NEW FINANCIAL	NMENTAL APPRAISAL AN FORECAST.   WILL
AND KEY PERSONNEL.	Budget Code:	
Target Dates: Start 4/18/72	Complete	772
Resources which assignee cannot secure himself project may be begun:  PLANNING PREMISES AND PLANNING GUIDELINES WILL	•	<u>-</u>
Progress Report Dates I will WANT TO REVIEW PRO	GRESS EACH TWO WEEKS	S AT MONDAY 11:00 A.M

# SCHEDULE FOR CORPORATE PLANNING AT BLUE RIDGE ELECTRIC

Аст	IVITY	Assignment	TARGET DATE FOR COMPLETION
1.	REVIEW CORPORATE OBJECTIVES. UPDATE AS NEEDED.	EXECUTIVE V. P.	May 1, 1972
2.	UPDATE FINANCIAL FORECAST.	MANAGER OF FINANCE	
3•	DEVELOP TREND DATA IN ALL KEY RESULT AREAS.	STAFF MANAGERS	
4.	DETERMINE THE GAP BETWEEN FORECAST TRENDS AND THE TRENDS WE WOULD LIKE TO HAVE.	STAFF MANAGERS	
5.	CORPORATE APPRAISAL (ASSESSING INTERNAL STRENGTHS AND WEAKNESSES)	MANAGEMENT STAFF	
6.	Environmental Appraisal (Socio-Economic Environment in which BRE operates)	Management Staff Led by Manager of Member & PR	
7•	DEVELOPMENT OF PLANNING PREMISES (INCLUDING CONSTRAINTS AND RESTRICTIONS) & DEVELOPMENT OF CORPORATE STRATEGY	STAFF MANAGERS & EXECUTIVE VICE PRESIDENT	June 1, 1972
8.	DEVELOPMENT OF BASIC LONG RANGE PLABY STAFF MANAGERS IN THE FOLLOWING KEY AREAS:	N	JULY 1, 1972
	A. PROFIT TARGET AND B. SECONDARY OBJECTIVES C. GOALS TO REACH EACH OBJECTIVE D. INPUT POWER NEEDS E. FACILITIES F. MANPOWER G. FINANCE H. OPERATIONS I. SERVICES TO MEMBERS J. POWER USE K. MERGER AND/OR FEDERATED SERVICE	CORPORATE EXISTENCE ELECTRIC SERVICE MEMBER RELATIONS SERVICES TO MEMBERS POWER UTILIZATION AREA DEVELOPMENT ORGANIZATION CAPITAL PERSONNEL - EMPLOYEES PUBLIC RELATIONS S	
9•	REVIEW AND EDITING BY LONG RANGE ST OF BOARD OF DIRECTORS	UDY COMMITTEE	July 31, 1972

COORDINATION TO BE DONE BY ADMINISTRATIVE ASSISTANT

August 19, 1972

10. ADOPTION OF PLAN BY BOARD

# SYSTEM PLANNING PREMISES FOR BLUE RIDGE ELECTRIC

FINANCING - 40% EQUITY BY 1985 - USE OF CURRENT REVENUES & RESERVES - BORROWED FUNDS

(1) ELECTRIC PLANT - ADDITIONS - UTILIZATION - OPERATIONS - ENVIRONMENT

GENERAL PLANT - ADDITIONS - UTILIZATION - OPERATIONS - ENVIRONMENT

PUBLIC AND MEMBER RELATIONS - INFORMATION - UNDERSTANDING - ACCEPTANCE

AREA DEVELOPMENT - LEADERSHIP - SOCIO-ECONOMIC DEVELOPMENT OF AREA

SALES - EFFICIENT USE OF POWER

RATES - MEET OPERATING NEEDS, PROVIDE MARGINS FROM 10 TO 15 PERCENT

RECORDS - ACCURACY COMMENSURATE WITH NEED AND COST

MANPOWER (PERSONNEL) - QUALIFIED PEOPLE WITH MEANINGFUL WORK

METHODS AND TECHNOLOGY (OPERATIONS) - NEW METHODS APPLIED WITH NECESSARY RESEARCH AND EVALUATION

Services to Members - Identify service needs of member and determine Blue Ridge

Electric's ability to meet these needs in way to benefit member

ORGANIZATION - EVALUATE AND CHANGE AS NEEDED TO MEET NEEDS OF MEMBERSHIP.

#### TYPICAL STATEMENT

"SYSTEM PLANS WILL REFLECT THE FOLLOWING:

# (1) ELECTRIC PLANT

ADDITIONS - ADDITIONS AND IMPROVEMENTS TO PLANT WILL BE PROGRAMMED AND MADE THAT ASSURE ADEQUATE SERVICE AT THE MOST ECONOMICAL COST.

UTILIZATION - ELECTRIC PLANT WILL BE UTILIZED TO PROVIDE QUALITY SERVICE IN THE MOST ECONOMICAL MANNER.

OPERATIONS - ELECTRIC PLANT WILL BE OPERATED AND MAINTAINED IN GOOD CONDITION AND IN A MANNER THAT WILL PROVIDE THE MOST EFFICIENT AND ECONOMICAL SERVICE.

ENVIRONMENT - ENVIRONMENTAL CONCERNS WILL BE GIVEN PROPER PRIORITY IN THE BUILDING AND MAINTENANCE OF ELECTRIC PLANT."

# BLUE RIDGE ELECTRIC MEMBERSHIP CORPORATION

JUNE 2, 1972

# SYSTEM PLANNING PREMISES

TO GUIDE SYSTEM PLANNING, BOTH LONG AND SHORT RANGE, THE FOLLOWING PLANNING PREMISES SHALL HOLD:

# FORECASTING

FORECASTS WILL BE PREPARED FOR TEN-YEAR PERIODS FOR: KWH SALES; REVENUES; OPERATING EXPENSES; PLANT NEEDS, WITH PROJECTIONS FOR ELECTRIC PLANT NEEDS EXTENDING FOR TWENTY YEARS. FORECASTS WILL BE UPDATED AT LEAST EACH TWO YEARS AND MORE OFTEN IF THE ECONOMIC OR OPERATING CONDITIONS WARRANT IT.

ALL PLANNING WILL BE BASED ON TEN-YEAR FORECAST.

FORECASTING WILL BE BASED ON TRENDS WITH ALLOWANCES BEING MADE FOR UNUSUAL CONDITIONS.

SYSTEM PLANS WILL REFLECT THE FOLLOWING:

# FINANCING

EVERY EFFORT WILL BE MADE TO BUILD MEMBER EQUITY TO 40% BY 1985.

OPERATING NEEDS WILL BE MET FROM CURRENT REVENUES.

PLANT ADDITION NEEDS WILL BE MET FROM BORROWED FUNDS SECURED UNDER THE MOST FAVORABLE CONDITIONS POSSIBLE AND FROM MEMBER CONTRIBUTED CAPITAL.

ANY RESERVE FUNDS WILL BE INVESTED TO BRING A REASONABLE RETURN AND FURTHER THE OBJECTIVES OF THE CORPORATION.

# ELECTRIC PLANT

ADDITIONS - ADDITIONS AND IMPROVEMENTS TO PLANT WILL BE PROGRAMMED AND MADE THAT ASSURE ADEQUATE SERVICE AT THE MOST ECONOMICAL COST.

UTILIZATION - ELECTRIC PLANT WILL BE UTILIZED TO PROVIDE QUALITY SERVICE IN THE MOST ECONOMICAL MANNER.

OPERATIONS - ELECTRIC PLANT WILL BE OPERATED AND MAINTAINED IN GOOD CONDITION AND IN A MANNER THAT WILL PROVIDE THE MOST EFFICIENT AND ECONOMICAL SERVICE.

ENVIRONMENT - ENVIRONMENTAL CONCERNS WILL BE GIVEN PROPER PRIORITY IN THE BUILDING AND MAINTENANCE OF ELECTRICAL PLANT.

#### GENERAL PLANT

ADDITIONS - ADDITIONS AND IMPROVEMENTS WILL BE MADE AS NEEDED TO ASSURE ADEQUATE FACILITIES FOR THE ADMINISTRATIVE AND OPERATING NEEDS OF THE CORPORATION.

UTILIZATION - GENERAL PLANT FACILITIES WILL BE UTILIZED IN THE BEST INTERESTS OF THE TOTAL OPERATION IN THE MOST EFFICIENT AND ECONOMICAL MANNER POSSIBLE.

OPERATIONS - GENERAL PLANT FACILITIES WILL BE MAINTAINED IN FIRST CLASS CONDITION AND OPERATED IN A MANNER THAT WILL PROVIDE THE MOST EFFICIENT AND ECONOMICAL SERVICE TO THE CORPORATION.

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# GENERAL PLANT (CONTINUED)

ENVIRONMENT - ENVIRONMENTAL CONCERNS WILL BE GIVEN PROPER PRIORITY IN THE BUILDING AND MAINTENANCE OF GENERAL PLANT FACILITIES.

# PUBLIC AND MEMBER RELATIONS

PROGRAMS WILL BE IMPLEMENTED TO ASSURE MEMBER AND PUBLIC UNDERSTANDING OF THE OBJECTIVES AND GOALS OF THE CORPORATION AND ITS CONTRIBUTION TO SOCIETY, AND KEEP THE MEMBERS INFORMED ON MATTERS DIRECTLY AFFECTING THEM.

# AREA DEVELOPMENT

PROGRAMS WILL BE CARRIED OUT WHICH WILL MOVE THE AREA FORWARD ECONOMICALLY AND SOCIALLY WITH CORPORATE PERSONNEL SERVING IN LEADERSHIP ROLES AND PROVIDING RESOURCE ASSISTANCE.

# SALES

Power sales programs will be planned and implemented in such manner to emphasize the efficient use of power by member-consumers and to meet the real needs of members.

# RATES

RATES FOR ELECTRIC POWER WILL BE DESIGNED TO MEET ALL OPERATING NEEDS OF THE CORPORATION EQUITABLE, SIMPLE, AND UNDERSTANDABLE - AND TO PROVIDE MARGINS SUFFICIENT TO ASSURE A SOUND FINANCIAL CONDITION FOR THE CORPORATION. (MARGINS OF FROM 10 TO 15%)

# RECORDS

THE CORPORATION WILL MAINTAIN THOSE RECORDS REQUIRED BY LAW AND SUCH OTHER RECORDS AS ARE NECESSARY TO ITS EFFICIENT OPERATION. THESE RECORDS WILL BE MAINTAINED WITH AN ACCURACY COMMENSURATE WITH THE NEED FOR ACCURACY AND THE COST.

# MANPOWER (PERSONNEL)

THE CORPORATION WILL EMPLOY PERSONNEL QUALIFIED TO MEET MANPOWER NEEDS OF THE ORGANI-ZATION AND WILL ADEQUATELY COMPENSATE THEM. EVERY OPPORTUNITY WILL BE GIVEN FOR DEVELOPMENT AND MERITORIOUS SERVICE WILL BE REWARDED. MEANINGFUL WORK WILL BE PROVIDED AND INCOMPETENCE WILL NOT BE TOLERATED.

# METHODS AND TECHNOLOGY (OPERATIONS)

New methods and technology will be applied and the necessary research and evaluation done to assure the application will bring the desired results in the operation of the corporation. Each staff department has a major responsibility in this area. Value analysis will be applied in all cases.

# SERVICES TO MEMBERS

EFFORTS WILL BE MADE TO IDENTIFY POSSIBLE SERVICES THAT MEMBERS DESIRE AND THEN A DETERMINATION MADE REGARDING THE CORPORATION'S ABILITY TO MEET NEEDS IN A WAY THAT WILL BE OF REAL BENEFIT TO THE MEMBERS.

# ORGANIZATION

CONTINUOUS EVALUATION OF THE ORGANIZATION WILL BE MADE TO ASSURE THAT SYSTEM OBJECTIVES, BYLAWS, POLICIES, PRACTICES, AND PROGRAMS ARE MEETING THE NEEDS OF THE MEMBERSHIP AND THE AREA IT SERVES, AND THAT ADEQUATE STAFFING AND RESOURCES ARE PROVIDED TO CARRY OUT THE OBJECTIVES AND CHANGES MADE AS NEEDED.

# SPECIFIC GUIDELINES FOR CORPORATE PLANNING

COVER THESE AREAS .

CORPORATE EXISTENCE	-	BOARD MIX - Type of BOARD - STATUE AND COMMISSION REQUIREMENTS CHARTER
ELECTRIC SERVICE	-	INPUT POWER - PLANT - URD - ENVIRONMENT
MEMBER RELATIONS	-	Youth - Planned Written Member Communications - District Meetings
POWER UTILIZATION	_	POTENTIAL USES OF POWER
AREA DEVELOPMENT	-	CATALYST ROLE
ORGANIZATION	-	INNOVATIVE PLANNING TO MEET REQUIREMENTS OF CORPORATE PROGRAMS
CAPITAL		MEMBERS TO CONTRIBUTE AT LEAST 12% MARGINS ANNUALLY
EMPLOYEES		PROVIDE OPPORTUNITY FOR MAXIMUM CONTRIBUTION TO THE CORPORATION
PUBLIC	-	MEET CORPORATE CITIZEN ROLE AND INFORM PUBLIC
LEADERSHIP	-	BRE EXPECTS TO MAINTAIN LEADERSHIP ROLE IN PUBLIC UTILITY FIELD
Merger, Federated Services	-	MOST EFFICIENT AND ECONOMIC SERVICES THROUGH MERGER OR FEDERATED SERVICES

#### TYPICAL STATEMENT

# MEMBER RELATIONS

YOUTH: BLUE RIDGE ELECTRIC WILL DEVELOP AND IMPLEMENT INNOVATIVE PROGRAMS FOR INVOLVING MORE YOUTH.

PLANNED WRITTEN MEMBER COMMUNICATIONS: BLUE RIDGE ELECTRIC WILL DEVELOP ITS WRITTEN MASS COMMUNICATIONS (NEWSBULLETIN, DISTRICT MANAGER'S NEWS LETTER, ETC.) TO MEMBERS AS A REAL TOOL FOR REACHING MEMBERS.

DISTRICT MEMBER MEETINGS: BLUE RIDGE ELECTRIC WILL PLAN ITS DISTRICT MEMBER MEETINGS, RECOGNIZING THE VARIOUS DIFFERING MEMBER GROUPS, AND WILL ARRANGE THE MEETINGS SO THAT DIRECTORS AND EMPLOYEES WILL BE OUT WITH MEMBERS MORE IN A SETTING THAT PUTS MEMBERS AT EASE. BLUE RIDGE ELECTRIC WILL RECOGNIZE AND USE DIFFERENT GROUPINGS OF MEMBERS TO EXPLORE TOGETHER NEEDS AND RESPOND TO THOSE NEEDS. (EXAMPLES: FARMERS, YOUTH, BUSINESS-MEN, SEASONAL MEMBERS, WOMEN, ETC.)

# BLUE RIDGE ELECTRIC MEMBERSHIP CORPORATION

June, 1972

TO: MANAGEMENT STAFF MEMBERS

FROM: EXECUTIVE VICE PRESIDENT

SUBJECT: SPECIFIC GUIDELINES FOR LONG RANGE PLANNING

# Corporate Existence

Consideration should be given to different mix in Board - background, age, sex, race, etc. Look at complexity of organization ten to fifteen years from now.

Consideration should be given to change in state statutes - EMC coming under commission - Change in limitation on director's per diem.

Change in charter of corporation - to meet member needs.

# Electric Service

<u>Input power</u>: Look to consumer-owned production of electricity to assure members that they are getting power at the lowest cost - could be self-generation or through EPIC.

Blue Ridge Electric will maintain its position of having options (other sources of power) which give promise for lower unit input cost.

Blue Ridge Electric will plan to support financially joint research for the fast breeder reactor and other potential beneficial ways of producing electric power.

<u>Plant</u>: Blue Ridge Electric will program to put all construction underground (primary and secondary) where overall costs do not penalize consumer (doesn't cost more than present overhead method).

Blue Ridge Electric will program 5% of all other new construction to be underground for the foreseeable future, with this percentage to be increased at such time as the costs do not present a prohibitative burden.

<u>Environment</u>: Blue Ridge Electric will, in all new stations and existing stations, build them and remodel in such manner and with such screening as to harmonoze with the environment.

# Member Relations

Youth: Blue Ridge Electric will develop and implement innovative programs for involving more youth.

<u>Planned Written Member Communications</u>: Blue Ridge Electric will develop its written mass communications (newsbulletin, district manager's news letter, etc.) to members as a real tool for reaching members.

<u>District Member Meetings</u>: Blue Ridge Electric will plan its district member meetings, recognizing the various differing member groups, and will arrange the meetings so that directors and employees will be out with members more in a setting that puts members at ease. Blue Ridge Electric will recognize and use different groupings

# Member Relations (Continued)

District Member Meetings: (Continued)

of members to explore together needs and respond to those needs. (Examples: farmers, youth, businessmen, seasonal members, women, etc.)

# Power Utilization

Potential Uses of Power: Blue Ridge Electric will be aware of the potential of the electrically powered automobile and its possibility for meeting a need in the area of transportation as well as pollution abatement and its potential for load leveling (off peak use). Blue Ridge will plan to be a leader in making the electric automobile and its use a reality to our members. Blue Ridge Electric will be in forefront of helping to promote the use of equipment which holds promise of great benefit to our members.

# Area Development

Blue Ridge Electric will plan to fill a catalyst role in area development; working through county, city, community, and local groups to define needs, provide leadership, secure governmental agency assistance, and provide information. Blue Ridge Electric will not give major emphasis to activities which can best be carried out by local government or agency officials. Blue Ridge Electric will emphasize total area development, recognizing that the economy must be strong enough to support housing and similar programs.

Blue Ridge Electric will plan to provide resource persons to the local community to help meet the social and economic needs which will build the area and result in improvement of the total community. Blue Ridge Electric will do those things which will provide an opportunity for people of our area in the lower economic strata to earn a better living.

#### Organization

Blue Ridge Electric will do innovative planning to assure that organization will meet requirements of corporate programs; that manpower, methods, etc. and other resources are available to meet current needs.

## Capital

Blue Ridge Electric will plan for members to contribute at least 12% margins annually to the growth needs of the system. Blue Ridge Electric will plan the use of and manage its cash so that capital needs are met as required, and return of some portion of members' equity is planned for each generation (twenty years).

# Employees

Blue Ridge Electric will plan its organization and operation so that each employee can be provided with an opportunity to make his best contribution to the corporation.

#### Public

Blue Ridge Electric will plan communications with the public in such manner to provide information which will keep public aware of Blue Ridge Electric's role as a corporate citizen and of its plans and progress.

# Leadership

Blue Ridge Electric will reflect in all its long range planning the leadership role in the public utility field which it expects to maintain.

# Merger, Federated Services

Blue Ridge Electric will plan to do everything possible to bring about better services to its membership, more efficient and economical operations, and participate in programs which will be mutually beneficial to Blue Ridge Electric and other electric utilities, whether through merger or federated services such as the MDM programs.

# TYPICAL PLANNING STATEMENT (FIRST DRAFT) BY STAFF MANAGER

# CAPITAL

CASH MANAGEMENT: BLUE RIDGE ELECTRIC WILL HAVE A CASH MANAGEMENT PROGRAM WHICH WILL INSURE THE MEETING OF OUR CAPITAL NEEDS. THIS PROGRAM WILL CONTAIN A YEARLY PLAN WHICH WILL BE REVIEWED ON A WEEKLY BASIS AND MONTHLY REPORTS GIVEN TO THE GENERAL MANAGER AND BOARD OF DIRECTORS. IT WILL CONTAIN A LONG RANGE FORECAST WHICH WILL GIVE LONG RANGE ESTIMATES OF OUR CASH NEEDS AND PLANS WILL BE DEVELOPED FOR MEETING THESE NEEDS.

PRESENT GOAL: DEVELOP BUDGETS WHICH WILL MEET OUR CASH NEEDS AND CONTROLS TO ASSURE WE STAY WITHIN THESE BUDGETS.

TWO TO FIVE YEARS: DEVELOP BUDGETS AND CONTROL INFORMATION THAT SHOW DEFINITE IMPROVEMENTS IN OUR CONTROL OF OPERATING EXPENSES.

TEN YEARS: DEVELOP TEN-YEAR PLAN WHICH STATES TEN-YEAR FINANCIAL NEEDS.
HAVE A LONG RANGE PLAN, KEEPING ABREAST OF THE CHANGES AND REA AND CFC PLANS
FOR MEETING OUR CAPITAL NEEDS UP TO AND INCLUDING GOING INTO THE OPEN MARKET
ON OUR OWN IF NECESSARY.

# EDITED STATEMENT - FINAL DRAFT

# CAPITAL

CASH MANAGEMENT: PLAN CASH MANAGEMENT PROGRAM SO THAT BORROWED FUNDS WILL BE AT THE LOWEST POSSIBLE INTEREST RATE AND STILL MEET OUR CAPITAL REQUIREMENTS.

PRESENT GOAL: DEVELOP BUDGETS THAT WILL MEET COOPERATIVE'S CASH NEEDS AND CONTROLS TO ASSURE THAT SYSTEM IS STAYING WITHIN THESE BUDGETS. REFINE RESPONSIBILITY ACCOUNTING PROGRAM WHICH IS PRESENTLY IN EFFECT IN THE ORGANIZATION.

Two-Five Years: Develop Budgets and control information that show definite improvements in the control of operating costs.

MAKE A STUDY OF POSSIBILITY OF PROVIDING MEANS FOR MEMBER TO INVEST ADDITIONAL FUNDS WITH HIS COOPERATIVE AND DEVELOPMENT RECOMMENDATIONS.

TEN YEARS: HAVE A FINANCIAL FORECAST WHICH STATES TEN YEAR NEEDS OF THE COOPERATIV. TIE TO LONG RANGE PLAN, KEEPING ABREAST OF THE CHANGES IN REA AND CFC AND PLANS FOR MEETING CAPITAL NEEDS UP TO AND INCLUDING GOING INTO THE OPEN MARKET IF NECESSARY AND PERMITTING MEMBERS TO INVEST.

# TYPICAL STATEMENT FROM CORPORATE PLAN

# B. ELECTRIC SERVICE

I. INPUT POWER: LOOK TO CONSUMER-OWNED PRODUCTION OF ELECTRICITY TO ASSURE MEMBERS THEY ARE GETTING POWER AT THE LOWEST COST.

PRESENT:

CONTINUE TO SUPPORT ALL THE EFFORTS OF EPIC, BOTH FINANCIALLY AND THROUGH PERSONAL INVOLVEMENT. SUPPORT FINANCIALLY THE JOINT RESEARCH PROJECT FOR THE FAST BREEDER REACTOR. (SUPPORT OF THIS PROJECT AND OTHER FEASIBLE PROJECTS SHALL BE THE GOAL FOR THE ENTIRE TEN-YEAR PERIOD.)

TWO-FIVE YEARS:

UPDATE POWER INPUT STUDIES TO DETERMINE BEST WAYS OF MEETING INPUT POWER NEEDS. STUDY TO INCLUDE SUCH ALTERNATIVES AS EPIC, SELF-GENERATION TVA INTER-TIE, OR SOME OTHER SOURCE OF CONSUMER-OWNED PRODUCTION OF POWER. ALSO STUDIES TO INCLUDE POSSIBLE JOINT VENTURES WITH CONSUMERS AND PRIVATELY-OWNED GENERATION AND TRANSMISSION.

TEN YEARS:

AT END OF THE TEN-YEAR PERIOD, THE COOPERATIVE TO HAVE A DIRECT CONTROL OF INPUT POWER ARRANGEMENTS OR A PLAN FOR ACHIEVING THIS CONTROL.

2. ELECTRIC PLANT CONSTRUCTION: ALL CONSTRUCTION WILL BE UNDERGROUND WHERE OVERALL COSTS DO NOT PENALIZE CONSUMERS AND AT LEAST 5% OF ALL OTHER NEW CONSTRUCTION WILL BE UNDERGROUND WITH THIS PERCENTAGE INCREASED AS COSTS FOR UNDERGROUND AND OVERHEAD CONSTRUCTION EQUALIZE. (IN THE VALUE ANALYSIS OF UNDERGROUND CONSTRUCTION MAINTENANCE AND OPERATION COSTS WILL BE CONSIDERED.)

PRESENT:

PLANS WILL BE DEVELOPED TO PROMOTE UNDERGROUND FACILITIES FOR ALL NEW DEVELOPMENTS AND OTHER INSTALLATIONS WHERE COSTS ARE COMPARABLE WITH OVER-HEAD AND WILL PROMOTE UNDERGROUND WHERE COSTS ARE PROHIBITIVE WHEN CONSUMER IS WILLING TO PAY THE DIFFERENTIAL IN COST. ADDITIONAL STUDIES ON UNDER-GROUND CONSTRUCTION WILL BE INSTITUTED AND RECOMMENDATIONS DEVELOPED FOR NEW POLICIES IN THIS AREA.

TWO-FIVE YEARS:

LIMITED PROGRAMS WILL BE IMPLEMENTED TO PLACE AT LEAST 5% OF ELECTRIC PLANT UNDERGROUND ON ALL PLANNED CONSTRUCTION WORK. MAJOR EMPHASIS WILL BE PLACED IN SELECTED URBAN AREAS, GROWING CENTERS OF BUSINESS AND SHOPPING, AND SCENIC AREAS WHERE OVERHEAD CONSTRUCTION IS VISUALLY OBTRUSIVE.

TEN YEARS:

PLACE ALL NEW SERVICE EXTENSIONS UNDERGROUND. PLACE ALL PLANNED IMPROVEMENT PROJECTS UNDERGROUND (PRIMARY) WHERE ECONOMIC FEASIBILITY CAN BE MET.

# BLUE RIDGE ELECTRIC MEMBERSHIP CORPORATION WORK PROJECT ASSIGNMENT

Assignor C. E. VIVERETTE	Date 4/18/72
Recipient Barbara (Chairman-Coordinator) Wayne - Henry	r - Ron
Project Develop corporate strategic plan for each of You are responsible - plan to be based on corporate a forecast information - plan to be tested with new fin necessary guidelines. Input should be received from personnel.	AND ENVIRONMENTAL APPRAISAL AND USE ON NANCIAL FORECAST. I WILL PROVIDE ALL DEPARTMENT MANAGERS AND KEY
	get Code:
Target Dates: Start 4/18/72 Comp	plete7/14/72
Resources which assignee cannot secure himself but project may be begun.  PLANNING PREMISES AND PLANNING GUIDELINES	
Progress Report Dates   WILL WANT TO REVIEW PROGRESTAFF MEETINGS AND ON SPECIAL OCCASIONS AS REQUIRED.  (7-3) WHEN PLAN IS REFINED AND APPROVED BY THE BOARD,  6/70 1973 WORK PLAN.	(5-1) (5-15) (5-20) lung in Politica
	·
RESULTS REPORT	
Project Completed: Date JULY 1, 1972	
Results: Final draft for Corporate Strategic Plan de	VELOPED BY THE STAFF MANAGERS
READY FOR REVIEW BY EXECUTIVE VICE PRESIDENT (SEE ATTA	
STAFF MEMBERS.	STATE OF THE MANAGEMENT
Franking	
ADMINISTRATIVE ASSISTANT WILL SAME	
ADMINISTRATIVE ASSISTANT WILL FINALIZE PLAN WHEN EXEC	UTIVE VICE PRESIDENT HAS MADE ANY
EDITORIAL CHANGES HE MAY DEEM NECESSARY.	
Proposed Follow-Up Action:	
Administrative Assistant will work with Executive Vice	PRESIDENT AND BOARD COMMITTEE
IN PREPARATION OF PLAN FOR PRESENTATION TO BOARD OF DIF	
Date For Action PRESENTATION TO BE MADE TO BOARD OF [ MEETING.	

# EXAMPLE OF CHANGE IN PLANNING STATEMENT MADE BY AD HOC STUDY COMMITTEE OF BOARD

STATEMENT AS PRESENTED BY EXECUTIVE VICE PRESIDENT -

# AREA DEVELOPMENT

"TOTAL DEVELOPMENT: TWO-FIVE YEARS GOALS: SEE THAT FINANCING WITH TERMS WHICH WILL ENABLE ALL CITIZENS OF THE SERVICE AREA TO HAVE THE OPPORTUNITY TO ACQUIRE A SUITABLE HOME WITH CONSTRUCTION PROGRAM MEETING THE DEMAND FOR HOMES. EMPHASIS TO BE GIVEN TO FMHA ACCEPTED STANDARDS FOR HOMES."

STATEMENT AS REVISED BY BOARD COMMITTEE -

"Help arrange financing which will enable all citizens of the service area that desire it to have their own home. Work with builders to assure demands for new homes are being met and standards of construction are equal to or higher than those of FMHA.

EXAMPLE OF EDITING BY BOARD COMMITTEE -

# CORPORATE EXISTENCE

BOARD MAKE-UP: Two-five years goal: To have the Make-up of the Board More NEARLY REFLECT THE MEMBERSHIP WITH REGARD TO BACKGROUND, AGE, SEX, RACE, ETC. SPECIFICALLY, TO HAVE AT LEAST ONE WOMAN, ONE PERSON UNDER THE AGE OF THIRTY, AND ONE MEMBER OF A MINORITY RACE ON THE BOARD. SEE THAT DIRECTORS' CAPABILITIES ARE UTILIZED AND PROPER COMPENSATION IS PROVIDED.

COMMITTEE DELETED SENTENCE "SPECIFICALLY, TO HAVE AT LEAST ONE WOMAN, ONE PERSON UNDER THE AGE OF THIRTY, AND ONE MEMBER OF A MINORITY RACE ON THE BOARD."

EXERPT FROM BOARD POLICY STATEMENT ON STANDING COMMITTEES OF BOARD -

# LONG RANGE STUDY COMMITTEE

THIS COMMITTEE TO BE KNOWN AS THE LONG RANGE STUDY COMMITTEE WILL DO SUCH STUDY, ANALYSIS, AND EVALUATION AS NECESSARY TO ASSURE THE CONTINUITY OF THE ORGANIZATION. THIS COMMITTEE WILL PROVIDE THE OVER-VIEW OF THE COOPERATIVE NECESSARY TO ITS CONTINUITY. THE COMMITTEE WILL LOOK AT THE OBJECTIVES OF THE COOPERATIVE, ITS SERVICES, BOARD MAKE-UP, METHOD OF ELECTION, AREA REPRESENTATION, AND THE INTERMEDIATE GOALS OF THE COOPERATIVE, AND FORMULATE RECOMMENDATIONS TO ASSURE GUIDELINES ARE PROVIDED FOR MANAGEMENT WHICH WILL ENABLE THE COOPERATIVE TO REACH ITS STATED OBJECTIVES AND CONTINUE IN OPERATION. THE COMMITTEE SHALL BE COMPOSED OF AT LEAST ONE DIRECTOR FROM EACH DISTRICT. THE PRESIDENT SHALL SERVE AS EX-OFFICIO MEMBER OF THIS COMMITTEE.

EXAMPLE OF CORPORATE PLANNING STATEMENT AND 1973 WORK PROGRAM GOAL

STATEMENT FROM CORPORATE LONG RANGE PLAN -

"MEMBER RELATIONS

# MEMBER COMMUNICATIONS

DIRECTOR MEETINGS: "EMPHASIS TO BE ON THE ONE-TO-ONE COMMUNICATIONS OF MEMBERS WITH DIRECTORS ON SUBJECTS THAT ARE OF MUTUAL INTEREST CONCERNING THEIR COOPERATIVE."

Exerpt from Directors' Section of 1973 Work Program -

# QUARTERLY DISTRICT MEETINGS OF DIRECTORS

PURPOSE: TO PROVIDE A FORUM IN EACH DISTRICT WHERE MEMBERS AND BOARD CAN
MEET EACH THREE MONTHS IN AN INFORMAL AND UNSTRUCTURED SETTING
TO DISCUSS SYSTEM OPERATIONS AND MEMBER AND DIRECTOR RESPONSIBILITIES.

Public meetings will be held in each district by the Directors in the district during the week preceding the board meetings in the months of March, June, September, and December."

### EXERPT FROM MARCH, 1973 BOARD MINUTES

"MR. SUDDRETH REPORTED ON THE MEETING IN CALDWELL DISTRICT AND STATED
THAT HE FELT THESE (DISTRICT DIRECTOR) MEETINGS WERE BENEFICIAL AND
HOPED THAT AT FUTURE MEETINGS THEY WOULD HAVE MORE MEMBERS IN
ATTENDANCE . . . . MR. COCKERHAM REPORTED A VERY FINE MEETING HELD
IN THE ASHE DISTRICT OFFICE ON MARCH 16 WITH SOME GOOD DISCUSSION . . .
HE STATED THAT HE FELT THESE MEETINGS WERE A GOOD IDEA. MR. AUSTIN
REPORTED A GOOD MEETING HELD IN WATAUGA DISTRICT . . . . HE COMMENTED ON
THE FINE INFORMATION WHICH THE EMPLOYEES HAD PROVIDED CONCERNING THE
ACTIVITIES OF THE DISTRICT. MR. COLLINS REPORTED THAT THREE MEMBERS HAD
ATTENDED THE (DISTRICT DIRECTOR) MEETING IN ALLEGHANY DISTRICT, WITH
GOOD DISCUSSION."

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## APPLICATION OF CONTROL REPORTING TECHNIQUES

By: Everette Bristol, Chief Engineer/Staff Assistant Yampa Valley Electric Association Steamboat Springs, Colorado

### I. The Need For Effective Controls

Much has been said about change, the changing times and the alarming rate of change. Most of these statements could be appropriately related to the rural electrification program. We need only mention a few current happenings to point up the challenge facing rural electric systems today:

Escalating wholesale power costs

Skyrocketing interest rates

Rising tide of ecological concerns and consumerism

Mushrooming governmental regulations regarding civil rights, safety, wages and prices, environmental protection, etc.

Moreover we find a new kind of consumer, more knowledgable and sophisticated in their expectations and demands. Likewise there is a new type of employee in terms of mobility, independence and desire for involvement in the affairs of the organization.

These and the myriad crother similar problems obviously place heavy demands on the management of rural electric systems.

As difficult as the technical problems may be in finding new sources of energy, lessening pollution, etc., it appears the social considerations, dealing with people, will pose the more formidable challenge.

Managers will need improved skills in leadership, motivation and communication to deal effectively with the increasingly complex society.

The ability of mankind to advance in technology and the development of material resources has, unfortunately, little parallel in its successful management of human resources. The ability to harness rivers, explode atoms and explore

outer space has not been matched by similar achievements in human understanding and cooperation. We can send messages to men on the moon but we can't communicate with our neighbors or fellow workers.

Dr. William Menninger, famed psychiatrist, has pointed out that 70% of the people who lose their jobs are fired because of social incompetence.

People deplore the dehumanization that is occurring -- the lessening of human dignity and identity. Employees do want to contribute, to feel their work is important. Someone has said, "To reduce a man to nothing, give him work to do that has no value."

People want involvement in the ongoing process and they hold some rather strong convictions about the efficacy of many corporate goals today. Younger workers particularly, are not so bound by the traditional values of past generations, such as, the inherent virtues of hard work, self denial and do as you're told. They are largely more idealistic and impatient to correct the ills of our materialistic, industrialized society which has marched forward to the beat of technology, mass production and higher gross national product.

S. David Freeman, Director of the Ford Foundation's Energy Policy
Project discussed the energy crisis in the April issue of Public Power. He
observed that we have been measuring our progress by KWH used per capita
and gallons of gas burned (and TV sets per person and cars per home, etc.).
We now have some second thoughts about these criteria as standards for
measuring progress. Apparently our control system was not as effective as
it could have been, else we would have avoided the head on conflict between
energy and ecology. Likewise the major blackout in the north east in 1965
signalled us of things to come; was it recognized as a key indicator of impending brownouts and power shortages?

For too long, perhaps, we pursued the goal of low price at the expense of air quality and the natural landscape. Now some are advocating the absolute preservation of resources regardless of cost.

Mr. Freeman further observed that our nation can keep warm, get to work and back, and keep industry humming on 1/3 less energy than presently being used.

The rising tide of ecological concern and consumerism portend dramatic changes. Company goals which ignore the quality of life, the environment and the rights of individual consumers and employees are no longer acceptable.

At a recent meeting of engineers and operating superintendents we were discussing line extension policies, underground installations, etc., and it occurred to me that we sounded more like the I.O.U stereotypes than rural electric consumer owned cooperatives. Perhaps our members have a right to expect more than that.

By what standards do we now measure the service we're providing?

I'm afraid that all too frequently our consumers have become just another computer account. To some degree, we're conditioned by the P.U.C.'s edict to treat everyone the same, and in our effort to be non-discriminatory we lose the personal touch. Also, after a few head knocking sessions with high powered developers and promoters we are inclined toward an adversary position with everyone. These are not, however, admirable characteristics of any public utility, moreover a consumer service organization.

### II. Control - The Measurement/Evaluation Process

The generally accepted functions of management include Planning, Organizing, Staffing, Motivating, Coordinating, Directing, ---- and Controlling.

Controlling is the function of measuring progress and performance and evaluating them against plans and goals in such a way that desired results can be achieved.

Controlling is knowing how you're doing in time to take the necessary action for optimum results; it is measuring and comparing against standards to develop basic information for replanning.

Planning and controlling are closely linked. Essential to an effective control system are clear plans with well defined goals and time lines. Such committments can be embarrassing and even painful and so are often avoided. People don't necessarily like to be judged. But, identifiable objectives are necessary for evaluation of performance.

Other considerations for control techniques include: (1) Reports should be more than just interesting reading, they should detect, illuminate and point to where corrective action should be taken: (2) Control information should be relevant, simple, meaningful and usable by the people getting it. It need be only accurate enough to judge if the results, trends, etc. are acceptable.

There is danger of being inundated with so much extraneous information that it confuses the decision making.

(3) Time is of the essence. Control reports should be <u>forward looking</u> and presented in a timely manner. An approximate forecast may be more helpful than precise historical data. How valuable is the first quarter's cash requirement

forecast received in April?

- (4) There should be reasonable balance between short range and long range indicators; short term prospects, for instance, may look good at the expense of long range results.
- (5) Cost of obtaining the information is also a factor; the cost should be reasonable in terms of the potential benefits or loss. Complex information systems can be justified only if substantial options are open for decision making.
- (6) Since we can't continuously monitor all operations, we should zero-in on the important items, sometimes referred to as critical-point control.
- (7) Exception reporting is another commonly used method. If controls are properly established, it may be assumed that performance is on target and work is proceeding as planned, except as reported.
- (8) There is an unfortunate tendency to use indicators that are easy to measure and especially those that make us look good, rather than showing up the areas with poor results. "Mirror, mirror on the wall, is my rural electric operation (department) the fairest of them all?"

### III. YAMPA VALLEY'S EXPERIENCE

This morning I will share with you a few experiences that we've had in adapting to the changing environment in which we operate - what we are trying to do with control techniques, analysis and reporting. We hold no claim to being expert or original. I hope to show some changes we've made in our organization and our procedures and other actions we've taken as a result of our control system. Admittedly, some of the changes were slow in coming, suggesting that our controls were not as effective as they might have been.

I've heard that Conference "attenders" and participants often use such a gathering as a forum for bragging about their operations, extolling the virtues of their system and telling about all the good things they're accomplishing back home. Of course, I'm sure that's not the case with our group. And I'll try to tell it like it really is:

Exhibits Not Attached to Summary

Examples of Control Devices Feeder Voltage Profiles Interruption of Service System Growth Losses and Load Factor Revenue Per KWH Operating Expenses Member Relations and Consumer Service Rural Electric Industry Leadership Community Involvement Employee Relations Safety Record 1973 🖹 Employee Relations Program 1973 - Safety Program KPA Schedules KPA Reports

#### IV. SUMMARY

I have heard some of our most prestigious rural electric leaders state that given an average situation, with a captive market and built in growth, authority to raise rates, a protected area, rules, regulations and statutory requirements prescribed and spelled out by regulatory agencies, that mediocre management will not only survive, but that, in fact, it would be nearly impossible to fail!

How then do we measure the quality of management? What constitutes evidence of good management?

One suggestion is that all levels of management should be appraised by a combination of three factors - traits, performance of managerial functions and goal achievement. Management experts have differing opinions on the relative value of these three appraisal factors. However, it does seem quite obvious that being personable and performing the management functions "according to the book" are to no avail, if the end results are poor. On the other hand some managers may come out "smelling like a rose" through no effort of their own, but merely as a by product of circumstances beyond their control.

In measuring performance, how do we allow for variations in the situation, the uncontrollable or unpredictable factors that may significantly affect the outcome?

How do we measure a rural electric system in service to consumers, the community and the public above and beond the supplying of electric service as a mere utility function under satutory requirements?

Bare survival of a system under hostile and adverse conditions may demonstrate good management, while other systems, fortunately situated,

may prosper in spite of poor management.

How many systems, unnecessarily, sacrifice the needs and rights of individuals (both consumers and employees) on the altar of economic expediency and organization efficiency?

Senator Kennedy's eulogy of his brother included a thought which I believe illustrates enlightened rural electric management - "some see things as they are and ask why, others dream of things that might be and ask why not?" RURAL ELECTRIC FINANCIAL PROFILES AND PROJECTIONS

By: Donald E. Smith, Staff Economist National Rural Electrification Administration Washington, D. C.

I certainly appreciate the opportunity to appear before this distinguished group of co-op managers today to discuss the role financial forecasting in the planning and operation of the co-op, to explain the Financial Profile, and to discuss present and proposed REA financial forecasting requirements.

Developments leading to Financial Profile:

Meeting at NRECA Committee requests Congressional requests Loan criteria possibilities Data requirements

I was very interested in incorporating FPC's recent Cost
Analysis Program, or CAP, into our project. CAP is a simple yet
useful format expressing all costs, revenues, and margins on a
unit, or per KWH, basis. It determines the cost of providing
each unit of output, in our case being the cost per 1,000 KWH.

CAP is designed to focus continual attention on changes in each
of the costs incurred in operating the electric utility. For
example, it is the increases in unit costs and not absolute
dollar increases, which reduce margins and necessitate retail rate
increases.

Also the unit approach clearly indicates any efficiencies experienced, such as economies of scale, and conversely, problems which may be developing, such as rising administrative and general unit costs.

## (SHOW VISUAL #1/2- CAP)

Page 1 of our Financial Profile was largely a development of the CAP approach. All historic data was expressed as a total dollar amount, per unit, and in relation to plant. Per cent changes between years were also shown.

44



(SHOW VISUAL 2 - NATIONAL EXPENSE FIGURES)

(SHOW VISUAL 3 - NATIONAL REVENUE FIGURES)

(SHOW VISUAL 4 - NAT'L MARGINS, SALES, PLANT TIER, DSC, PRR)

The development of the historic data into a forecasting model useful to NRECA and potentially to all 900 varied distribution systems was the challenge.

The REA Financial Forecast (Bulletin 105-5) I think represents a satisfactory forecasting format. It is comprehensive and detailed and can profitably be used by co-ops in their financial planning.

However, by REA's admittance, their forecast is not presently being sufficiently utilized for this purpose! This is due primarily to what may be termed external and internal factors:

<u>EXTERNAL</u> - restrictions imposed by REA on assumptions allowed in the forecast (assumptions allowed may not be those of co-op manager)

Some of these limitations, we felt, would be overcome by using a simpler forecasting format, and one containing different key assumptions, such as KWH sales growth and cost of power increases.

It was on this basis that the Financial Profile's forecasting format was developed. It was not intended to replace or substitute the REA forecast Methods of Forecasting.

The starting point for all valid statistical methods used



in forecasting is a recognition that the value of any time series observation at a moment of time, "t", is a mixture of a trend element, a cyclical element, a seasonal element, and a random element. This can be written as

(SHOW VISUAL 
$$\vec{3}$$
:  $0_t = T_t \times C_t \times S_t \times R_t$ )
(COVER THIS UP......  $0_t = T_t \times R_t$ 

In dealing with annual data, we can drop the seasonal factor and the cyclical element is not necessary for our purposes. Therefore, we can concentrate on only two elements: the trend, and the random or subjective factor or factors.

The use of a computer in forecasting is in determining the trend, i.e.; finding a mathematical curve which will fit as closely as possible the yearly observations which one has available. If the forecasting simply projects the trend, regardless of how sophisticated and complicated the statistical method used, it is termed a naïve forecasting method, as is the REA forecast to a lesser extent.

It is the consideration of the R element, the random factors which have an impact on the projection and can alter the trend that it necessary not to rely on a naïve forecasting method.

A naïve forecast, based on statistical methods, tells us nothing about the underlying nature of the time series under consideration.  $\underline{\text{WHY}}$  has the series grown exponentially in the past? Will future growth follow the same pattern as past growth? Why not? What will alter it and by how much?

It is here that the experience and knowledge of the co-op manager and his staff are invaluable in constructing the most useful and accurate forecast possible.

It may be worthwhile to demonstrate just how drastically wrong forecasting on the basis of past trends can be for a rural electric system.

## (SHOW VISUALS - 4 9 5 9 6

A thorough and comprehensive review of all major factors which are likely to affect each projection is essential for a meaningful and useful forecast. This can be done prior to making . the forecast, as the REA forecast should be, or afterwards with proper review and revision as the Profile was intended.

### (VISUALS - 7 1 8 1 9 5 10

#### CHANGES IN FORMAT

Both the REA Financial Forecast and the Financial Profile are being revised.

#### Problems in Profile:

- 1. Rising expenses but no provision for revenue increases
- 2. Figures too dated
- 3. Problems in the programming (to be corrected)
- 4. Insufficient review by co-op

### Plans for Profile:

- 1. Incorporate 1972 data when available from REA. (Aug')
- Make changes in format (reduced size)
- Include more sophisticated trending (least squares) based on longer 5 year historic data base.
- 4. Provide to member systems on request basis only.
- 5. Cost would be minimal.

#### CHANGES IN REA FINANCIAL FORECAST:

Substantial changes are 'being made in the REA financial forecast. This is being done primarily to update the forecast to reflect current REA and supplemental financing conditions. Therefore, the most changed section is that of debt service.

The revised bulletin 105-5 is still in draft form and is not expected to be approved prior to the REA field conference in June.

#### LIST OF CHANGES BY SECTION:

- 1. Determination of loan unchanged, except that the classes of consumers are printed on form.
- 2. Determination of Revenue unchanged (revenue estimate tables, slippage, revenue per KWH)
  - Determination of plant investment minor changes.
- 4. Determination of debt and debt service, enlarged to provide for 3 types of existing and new debt:
  - 1. Prior REA loans at 2% interest
  - 2. New REA loans at 5% interest
  - 3. Existing and new CFC loans at 7% interest.

Since the format requires the listing of each note for each year, the new debt service section is some 8 pages in length and can require approximately 1,000 calculations.

- 5. Determination of operating expenses no change (restricted on cost of power increases)
- 6. Other changes: A number of "significant ratios" have been added, including:

- a. Rate of return on total assets
- b. Plant revenue ratio (PRR)
- c. Investment per consumer
- d. Operations & Maintence cost per consumer
- 3. Administrative & General expenses per consumer
- f. TIER and DSC levels, with amount of additional revenue required to provide TIER or DSC of\_\_\_\_\_

### DEVELOPMENTS IN UTILIZING COMPUTER IN FORECASTING:

I have tried to determine all efforts that have been made in computerizing the present REA financial forecast.

- 1. Stanley Consultants have computerized the entire forecast generally consistent with the REA format. It is written in Fortran and is run on one disc, 16 K, on their IBM 1130. The imput required on their program is rather extensive and is presently being offered for only a half-dozen co-ops.
- 2. Southern Engineering is presently writing a program in Fortran to accomodate the present REA format.
- 3. There has been some development in this area by individual co-ops, such as Central Electric Power Cooperative in Jefferson City.
  - Potential computerization
     (Format, Advantages, Limitations, Services).

## EXHIBITS FOR PRESENTATION

BY

VIRGIL H. HERRIOTT, GENERAL MANAGER

SIOUX VALLEY ELECTRIC, COLMAN, S. DAK.

MANAGEMENT DEVELOPMENT COUNCIL MEETING

FARGO, N. DAK.

MAY 8, 1973

# UTILIZATION OF THE RESULTS APPROACH TO PLANNING & CONTROL

### Introduction

- 1. Need for more effective management tools.
- 2. Our present use of the results approach has evolved over a number of years.
  - A. The process of identifying KPA's and developing objectives.

Transparency (1)

- 1. Board involvement.
- 2. Management Staff involvement.
- 3. Employee involvement.
- 4. Member involvement.
- 5. National program objectives as a guide.

Transparency (2 & 3)

- B. The communication of KPA's and objectives.
  - 1. Membership meetings -- district and annual.
  - 2. Employee meetings.
  - 3. Board meetings.
  - 4. Board training and self-appraisal.
  - 5. Staff meetings.
- C. The application of KPA's and objectives in
  - 1. Long and short-range planning.
  - 2. Annual work planning.
  - 3. Establishing emphasis areas.
  - 4. Resolving conflicting points of view.
  - 5. Preparing and interpreting KPA reports.
- D. The emergence of standards of performance.

Transparency (4)

- 1. Our definition of standards of performance.
- 2. The identification of standards.

- 3. Attempts at standards development.
- 4. REA Work Plan and Budget workshops.
- 5. Imbalance between administrative effort and results achieved.
- 6. Other problems encountered:
  - a. Lack of unit costs.
  - b. Lack of realistic standards.
  - c. Lack of challenging standards.
  - d. Lack of equitable standards.
  - e. Lack of up-to-date standards.
- E. Development of Results Expected approach.
  - 1. Identification of results areas in each key performance area.

2. Development of draft statements of results expected for each results area. (Management Staff).

- 3. Final development and adoption of results statements by the Board of Directors.

  Transparency (6)
- F. Communication of adopted results statements.
  - 1. Review and discussion with the management staff.
  - 2. Review and interpretation by department heads to employees.
- G. Application of results expected statements as a management tool.
  - 1. Use in developing annual work plan and budget. Transparency (7)
    - a. Conflict of objectives.
    - b. Determining emphasis and priorities.

Transparency (8)

- c. Clear identification of goals.
- d. Results reports.

Transparency (9)

- 2. Staff reports to the general manager.
- 3. Monthly reports to the Board.
- 4. KPA reports.

Transparency (10, 11 & 12

H. Advantages of results approach.

Transparency (13)

- 1. Better understanding of organization objectives.
- 2. Interpretation of objectives in terms of results expected.
- 3. Serves as a test of the appropriateness of work plan goals.
- 4. Easier for management to identify and concentrate on goals to assure their timely accomplishment.
- 5. Better overall understanding of budget requirements and their relation to work plan goals.
- 6. Better identifies those are and activities that need to be measured and how best to measure them.
- 7. Better and more understandable KPA reports.

## VIEWPOINTS

### OF THE

## SIOUX VALLEY EMPIRE ELECTRIC ASSOCIATION, INC.

We believe: That the individual citizen, whether in rural or urban America, can and will achieve a sense of personal pride, self-accomplishment and family security if he is given a real opportunity to participate in social, economic and political activities as a free and equal citizen.

We believe: That this nation's human and physical resources, under God, must be developed and utilized to the maximum extent possible and that this productive resource development should result in maximum public benefit, without regard to region, race, creed, social or economic circumstances.

We believe: That the development of the potential of rural America and the utilization of its assets will make a major contribution to the welfare of the nation and the world.

We believe: That the principles of self-help cooperative enterprise embody the freedoms and inalienable rights granted by the Constitution of the United States, and are consistent with the highest ideals of the free enterprise system.

We believe: That rural electric cooperatives have major responsibilities for helping to raise the standard of living and for improving the productivity and the opportunity for economic prosperity in an ever-changing rural America.

We believe: That a clean and healthy environment represents a valuable asset and an attractive incentive for reversing trends in the out migration of people from the rural area, and that the Cooperative has a clear responsibility in the conduct of its operations to take positive action to maintain and improve the quality of the environment of the rural area.

We believe: That the Sioux Valley Empire Electric Association can express these viewpoints through the vigorous and dynamic pursuit of the following objectives:

## POWER SUPPLY

To work for and support programs of natural resource development that include the development of an abundance of low-cost power for the public benefit and to secure, through the exercise of ownership rights and/or effective representation, an abundant supply of highest quality wholesale power at costs which reflect the benefits of long-range power supply planning, the coordination of investment, and the principles of non-profit operation.

## ELECTRIC POWER MARKETING

To achieve maximum acceptance of electric service from the Cooperative for meeting the power and energy requirements of existing and potential consumers in the Cooperative's service area, through active and continued promotion and the offering of truly low-cost, incentive-type electric rates that are competitive with other forms of energy.

### ELECTRIC SERVICE

To provide the member-consumers of the Cooperative with central station electric service which meets the highest industry standards in terms of availability, quality and continuity utilizing modern technology and in amounts necessary to adequately meet their ever-expanding power requirements.

## OTHER SERVICES

To identify and provide such other services as are required by the members to assure their maximum beneficial application of electricity and to actively support or conduct activities and programs designed to improve facilities and services throughout the rural community.

## FINANCIAL CONDITION

To secure adequate sources of long-term, low-cost financing for all major plant additions, to provide the working capital and reserve funds required for sound financial operations and to conduct the business affairs of the Cooperative in accordance with the principles of non-profit operation with ownership by the members.

## PRODUCTIVITY

To achieve the maximum beneficial use of available human, physical and financial resources through sound organizational structure, coordination and integration of activities and a continuous program of self-evaluation and improvement.

## MANAGEMENT & LEADERSHIP

To encourage, support and create the opportunity for Directors and employees who understand and accept cooperative philosophy to develop the management and leadership skills required for the application of the principles, tools and techniques of modern management to a vigorous and dynamic cooperative enterprise.

# EMPLOYEE TRAINING AND DEVELOPMENT

To attract and retain highly qualified employees who understand and accept cooperative philosophy, and to provide, on a planned, systematic and continuing basis, training and development opportunities for all employees that will permit them to effectively perform present and future job requirements

## MEMBER RELATIONS

To achieve widespread understanding, participation and involvement of the member-owners in the affairs of their Cooperative and provide them a real sense of ownership through a true demonstration of cooperative principles and the democratic process.

# CORPORATE CITIZENSHIP RESPONSIBILITY

To assume a leadership position through recognizable efforts and actions designed to enhance the social, cultural and economic status of those living in the rural community, to secure favorable public opinion and understanding of the activities and programs carried on by the Cooperative and to develop the legislative support needed to permit the continued pursuit of our objectives.

### STANDARDS OF PERFORMANCE

The identification of the conditions that will exist when the activity is performed in a satisfactory manner and when the results meet expectations.

### Quantitative Standards

Most desirable.

Require unit costs.

Require historical and industry data.

Require frequent updating.

## Qualitative Standards

Difficult to state.

Possibility of misunderstanding.

Generally rely on opinion.

More difficult to compare.

Imposed vs. mutually developed standards.

Administrative requirements.

# SIOUX VALLEY EMPIRE ELECTRIC ASSOCIATION, INC. COLMAN, SOUTH DAKOTA

#### STATEMENT OF OBJECTIVES AND RESULTS EXPECTED

November 1972

The following is designed to identify the key results areas and the results expected in these areas under each key performance area. It is intended that this document now, and as revised, can serve as a basis against which to measure the adequacy of annual work plan goals and to assist in the determination of the weight or priority that should be given various programs and activities in each year's annual work plan.

The annual work plan will attempt to identify the amount of progress towards these results that we can anticipate during 1973. We expect that these results will be clarified and stated in more specific terms as they are used and revised.

## POWER SUPPLY

To work for and support programs of natural resource development that include the development of an abundance of low-cost power for the public benefit and to secure, through the exercise of ownership rights and/or effective representation, an abundant supply of highest quality wholesale power at costs which reflect the benefits of long-range power supply planning, the coordination of investment, and the principles of non-profit operation.

- 1. Costs The cost of our wholesale power supply should not exceed the costs required by East River in carrying out programs and activities in accordance with the provisions of the wholesale power contract and which have the support of East River's member-systems.
- 2. Availability We must have assurance that both the short-term and long-term needs of the Cooperative for wholesale power have been anticipated and that our Board of Directors is informed of the approved plans that are available for most effectively meeting these needs.
- 3. Reliability We must have reliability and continuity of our wholesale power source that meets highest industry standards and reflects the application of equipment and practices which are designed to minimize the occurrence of outages and which permit the restoration of power supply service in the minimum time possible.
- 4. Representation Our representation with both East River and Basin should be of such a nature as will result in real influence on policies and programs of our power supply organizations, and when information to the Board and to the Cooperative is given in such a manner as will keep us well-informed of the plans and progress of East River and other power supply organizations.
- 5. <u>Coordination</u> Our long-range planning of system design and capacity must reflect a coordinated effort with East River and our operating personnel and management should schedule specific coordination activities with representatives of East River and other power supply organizations.
- 6. Natural Resources Development The Cooperative must continue to support power production plans which are consistent with the most effective utilization of our natural resources, recognizing appropriate environmental considerations.

### ELECTRIC SERVICE

To provide the member-consumers of the Cooperative with central station electric service which meets the highest industry standards in terms of availability, quality and continuity utilizing modern technology and in amounts necessary to adequately meet their ever-expanding power requirements.

- 1. Availability The policies and practices of the Cooperative must be such as to make available service from the Cooperative to any consumer who desires our service and who is legally eligible to receive it.
- 2. Type We must keep aware of, and apply modern technology in utility practices and offer electric service of the type required by present and potential electric consumers.
- 3. <u>Timeliness</u> Consumers requesting service from the Cooperative shall have electric service made available to them according to the consumers' needs, whether this service be of a temporary or permanent nature. Plans and programs of the Cooperative shall reflect an anticipation of the seasonal changes in demand for service from the Cooperative.
- 4. Technology The design of new distribution facilities shall include the application of up-to-date methods, techniques and equipment and be consistent with currently approved policies regarding the extension of electric service and the utilization of currently applicable apparatus and equipment. There shall be provision for periodic reports of compliance with such policies and there shall be available currently applicable plans and specifications for all types of approved distribution system construction.
- 5. Quality The quality of the Cooperative's electric service shall be such as to comply with accepted industry standards and, in particular, the standards described in REA Bulletin 169.4.
- 6. Continuity The distribution system shall be operated and maintained in such a manner that the frequency, type and duration of outages, the recording of outage data and the institution of remedial action shall comply with the provisions and standards contained in REA Bulletins 60-7 and 161-1. The standards of these bulletins shall be considered as minimum.
- 7. Capacity The capacity of the Cooperative's distribution system shall be managed in a manner that assures adequate capacity to meet daily and seasonal peak load requirements and also assures that individual transformer and service capacity requirements are being properly anticipated and adequately met. The capacity of the system shall be designed to reflect the effective application of voltage regulators, boosters and capacitors, in addition to multi-phase lines and conductor capacity.
- 8. Engineering The engineering function shall be conducted in such a manner as will permit professional interpretation of current operating statistics and data, as well as appropriate information regarding system performance and condition. Engineering services shall be performed on a timely basis, shall utilize approved plans and specifications, the provisions of REA policy bulletins and shall be consistent with Cooperative policy. The Engineering Department shall provide inspection of completed construction and the evaluation of construction costs compared to approved specifications and standards.

# ELECTRIC POWER MARKETING

To achieve maximum acceptance of electric service from the Cooperative for meeting the power and energy requirements of existing and potential consumers in the Cooperative's service area, through active and continued promotion and the offering of truly low-cost, incentive-type electric rates that are competitive with other forms of energy.

- 1. Rates and Service Policies There shall be consistent application of retail rates and service policies that have been approved by the Board of Directors, and which have been subjected to review and comment by RFA. These rates shall be such as to provide revenues adequate to meet anticipated financial requirements as described under Financial Condition. There shall be evidence of equitability in the costs of service between various classifications of consumers, as well as acceptance of the rates and service policies by present and potential consumers.
- 2. New Load Acquisitions There shall be established and maintained a program for becoming informed of, and for follow-up on, new loads which develop in the Cooperative's service area. There shall be reports of the results of this activity submitted periodically showing that the Cooperative's service is preferred over other power suppliers in the area. The Cooperative's legal right to extend electric service to consumers who desire it shall be maintained.
- 3. Advice and Assistance Advice and assistance programs carried on by the Cooperative shall be carefully analyzed, at least annually, and evidence presented to indicate that the programs offered are consistent with current member needs and that such services are being offered on an effective and timely basis.
- 4. Promotions Promotional programs designed to stimulate and encourage uses and applications of electricity as are deemed to be wise and beneficial and in the best interests of the consumers shall be planned and carried out.
- 5. Research and Development The Cooperative's role in research and development activities shall be to maintain a current awareness of new product developments that have potential application to member needs, to keep aware of the results of research and development activities by others and to make contributions to research projects deemed to have specific application by the Cooperative, or its consumers.

## OTHER SERVICES

To identify and provide such other services as are required by the members to assure their maximum beneficial application of electricity and to actively support or conduct activities and programs designed to improve facilities and services throughout the rural community.

- 1. Services for Hire The scope, type and number of services for hire provided by the Cooperative for its members shall be such as to meet a previously determined need, shall be available on a timely basis and shall be high quality in terms of product and workmanship, with costs to the consumers which are competitive and which will result in a recovery of costs to the Cooperative from the consumers. Provision shall be made for determining utilization of services for hire by consumers and their reaction to the quality, cost and timeliness of such services.
- 2. Free Services The Cooperative shall maintain a practice of providing for its members, without cost, such services as are not otherwise available and which are in the nature of objective advice and counsel to the members regarding the Cooperative, or the utilization of electric service from the Cooperative. Such services, if instituted and maintained, shall be of a high quality and offered on a timely basis. Reports shall be prepared at least annually which reflect the degree of utilization of such services and member reaction to them.
- 3. Youth Program The Cooperative shall demonstrate its interests in the youth in the area by offering information and participative programs which will provide opportunities for young people to become more familiar with the Cooperative and the area in which they live. All such youth programs shall be evaluated annually to determine the trends in participation, their relevance to current needs and conditions and reactions from those affected.
- 4. Community and Area Development The Cooperative shall assume a leadership role in community and area development activities by participating actively in programs designed to improve the rural community and to develop the rural area. Participation may be provided in terms of manpower, equipment, services, or direct financial support to appropriate community and area development groups
- 5. Member Insurance Program The Cooperative shall make available to its membership a major medical and related insurance programs designed to provide adequate, low-cost insurance coverages not otherwise available to the members in terms of either coverage or cost. The Cooperative shall keep currently informed regarding the performance and acceptance of such insurance program and make such changes and revisions as are indicated.

## FINANCIAL CONDITION

To secure adequate sources of long-term, low-cost financing for all major plant additions, to provide the working capital and reserve funds required for sound financial operations and to conduct the business affairs of the Cooperative in accordance with the principles of non-profit operation with ownership by the members.

- 1. Loan Funds Plans shall be developed which make provision for the availability of adequate amounts of low-cost, long-term capital for financing additions and changes in the Cooperative's electric plant. Periodic reports and forecasts shall be prepared which clearly indicate compliance with Board policy and policies of the lenders of capital to the Cooperative.
- 2. Reserve Funds Funds shall be maintained in specified reserve fund accounts by the Cooperative to meet unusual or unpredictable financial requirements and contingencies, which cannot be financed from current operating income, working capital or with loan funds. The level of such reserve funds shall be in compliance with Board Policy No. 202 and shall not be permitted to interfere with the Cooperative's ability to borrow long-term capital for all additions to distribution plant. Reserve funds shall be invested in organizations which assure maximum security and liquidity of the investment while, at the same time, bringing the maximum return to the Cooperative. Audits of compliance of these provisions shall be provided at least annually to the Board of Directors.
- 3. Working Capital Working capital shall be maintained in amounts sufficient to provide for the effective management of cash to meet current obligations, including inventories, interim construction financing and other current expenditures. There shall be available at all times reliable forecasts of cash flows which indicate the maintenance of adequate amounts of working capital and compliance with the provisions of the Cooperative's Financial Management Policy.
- 4. Patronage Capital The Cooperative shall account for, and notify its consumers regarding contributed patronage capital in a manner consistent with the bylaws and policies of the Cooperative and the requirements of the Internal Revenue Service. There shall be in existence a policy and plan for the revolvement and retirement of patronage capital, both to the estates of deceased patrons and for the general retirement of patronage capital.
- 5. Investments-Associated Organizations The Cooperative shall invest in associated organizations which provide services to the Cooperative, or whose activities are consistent with the goals and objectives of the Cooperative. Such investments shall be in terms of retained patronage capital or direct contributions of capital to the organization. All such contributions shall be consistent with approved contracts, policies, or other specific actions of the Board of Directors.
- 6. Non-Profit Operations There shall be provision in the policies and procedures of the Cooperative so that electric service and other services will be provided primarily to members. Services and products offered to non-members shall be kept to a minimum and, in no event, shall revenue from non-members be permitted to exceed 15% of total revenue.

### Financial Condition

- 7. Financial Planning, Forecasting and Budgets There shall be in existence a currently approved long-range financial plan which reflects capital requirement & the financial performance of the system for a period covering two to four times present kwh sales levels. In addition, there shall be prepared annually a 10-year financial forecast reflecting capital requirements and the financial performance of the system for the next ten years. Finally, there shall be prepared annually a capital and operating budget for the coming year. This budget shall reflect anticipated revenues and expenses, which result from accomplishing the approved plans and programs of the Cooperative for that year. The Cooperative's goal for Debt Service Coverage (DSC) shall be not less than 1.35 and for a Times Interest Earned Ratio (TIER) of not less than 1.65.
- 8. General Accounting The books and records of the Cooperative shall be maintained in strict compliance with the REA Uniform System of Accounts and other appropriatelegal and contractual requirements. A monthly statement of operations shall be prepared by the tenth working day of each month and attested to by the General Manager. Significant developments or deviations in the financial statement shall be reviewed monthly with the Board of Directors. Complete financial statements of the balance sheet and revenue and expense shall be presented for review by the Board of Directors quarterly.
- 9. Responsibility Accounting- A system of responsibility accounting shall be maintained which provides the information to management needed for making management decisions and evaluating progress and developments compared to plans and budgets.
- 10. Consumers' Accounting and Collecting There shall be in existence an approved Board policy describing the conditions for billing consumers and collecting amounts due the Cooperative for electric service. There shall be frequent reports from management reflecting the status of consumers' accounts receivable, along with evidence of efforts to maintain electric accounts receivable at a minimum level. A list of uncollectible accounts, along with a detailed description of the account, shall be submitted at least annually for the approval of write-off by the Board of Directors.
- 11. Unit Cost Accounting There shall be established and maintained a system of unit cost accounting on all appropriate areas of construction and system operations. Such unit cost records shall be utilized in developing standard costs and estimated costs of construction and various phases of the Cooperative's operation.
- 12. Inventories The Cooperative shall maintain sources of supply and inventories of materials, supplies and apparatus sufficient to permit the timely completion of additions to, and the maintenance and operation of, the distribution system. All receipts and disbursements to and from such inventories shall be carefully and accurately controlled. The level and turnover of the Cooperative's inventory shall be prescribed and reflected in the annual work plan.
- 13. Financial Audits There shall be conducted annually an audit of the books and records of the Cooperative by a certified public accounting firm retained by the Board of Directors. The minimum standards for the audit shall comply with the requirements of REA and CFC. There shall be evidence of interim internal audits conducted by management, along with reports to the Board of Directors, of the financial condition indicated and the results determined.

## PRODUCTIVITY

To achieve the maximum beneficial use of available human, physical and financial resources through sound organizational structure, coordination and integration of activities and a continuous program of self-evaluation and improvement.

#### 1. Human

- a. Structure The organization structure of the Cooperative shall be reviewed at least annually and revised to reflect an appropriate number of employees and positions to accomplish the goals reflected in the Cooperative's annual work plan. The assignment of responsibility shall be made in such a manner as to insure the availability of all employees of the Cooperative to assist in meeting peak work goals and deadlines. Maximum opportunity shall be provided in work assignments for individual employee growth and development.
- b. <u>Direction and Coordination</u> Delegation of authority shall be granted to permit decisions regarding the work to be made at the lowest practical level. There shall be provision for the coordination of work within departments and between departments.
- c. Morale and Motivation Employee responsibility shall be broadly stated in written form and accompanied by required procedures. Employees affected shall be consulted prior to decision-making. Management and supervisory personnel shall deal with their employees on a fair and consistent basis. Periodic evaluations shall be made of employee attitudes and concerns, with interpretations and the development of plans for remedial action.

### 2. Physical

- a. <u>Distribution System</u> Tests and measurements of consumer, feeder and substation loads shall be made to permit a continued determination of installed system capacity vs. loads. Such measurements shall be considered an integral part of planning future system additions.
- b. Headquarters Facilities The Cooperative's headquarter facilities shall be functionally designed and be adequate in terms of currently approved organization structures. Warehouse and storage facilities shall be provided consistent with inventory levels and types of materials and supplies required to carry out approved plans and programs.
- c. Transportation and Work Equipment There shall be a plan for the procurement, maintenance and replacement of transportation and work equipment. This plan shall be consistent with and reflect construction and related activities that have been previously developed and approved.

#### 3. Financial

- a. Net Worth The Cooperative shall determine from an evaluation of long and short-range financial plans the effect of the accomplishment of such plans on the Cooperative's net worth. The financial affairs of the Cooperative shall be managed in a manner that will permit assurance of eligibility for borrowing long-term, low cost capital for future plant additions.
- b. Source and Use of Funds There shall be available forecasts and periodic reports of the results of the management of the Cooperative's financial resources. Working capital used for interim financing of plant additions should be reimbursed at least quarterly. Advance payments should be utilized as necessary to maintain a General Fund level of less than REA's maximum for loan eligibility, or for the advance of loan funds.

## EMPLOYEE TRAINING AND DEVELOPMENT

To attract and retain highly qualified employees who understand and accept cooperative philosophy, and to provide, on a planned, systematic and continuing basis, training and development opportunities for all employees that will permit them to effectively perform present and future job requirements

- 1. Selection There shall be established a process for securing adequate numbers of qualified applicants for all vacant, or newly created, positions with the Cooperative. Job specifications shall be maintained which describe the key personal characteristics required for each position. The process shall also provide for a systematic evaluation of all applicants for positions with the Cooperative.
- 2. Orientation There shall be an orientation process which shall be followed in familiarizing all new employees with the Cooperative, their job responsibility and various employee benefit programs provided where available to employees. This orientation program shall include a description of the philosophy of the Cooperative and key areas of emphasis in Cooperative operations. A planned program of information for all employees shall be maintained with the primary emphasis on informing employees of new developments and plans, as well as those things which affect the employees and their working conditions.
- 3. Training and Development Training opportunities shall be provided for all employees to develop and maintain the skills required for changing responsibilities here at the Cooperative. Additional opportunity will be provided employees who desire to expand their particular skills and to become qualified for greater responsibilities. In addition, opportunities will be provided for personal development experiences by employees, both within and outside the Cooperative.
- 4. <u>Safety</u> The Cooperative shall maintain safe working practices, policies and procedures. The basic safety policies of the Cooperative shall be reviewed and approved by the Board of Directors and comply with at least minimum industry and governmental safety standards.
- 5. Wage and Salary Administration The Cooperative shall maintain policies and procedures for the effective administration of wages and salaries. These policies shall clearly describe the Cooperative's point of view regarding salary administration and the guidelines to be followed to assure the fair and equitable administration of wages, salaries and fringe benefits. Labor market areas for appropriate wage and salary groups shall be established and surveyed annually to determine appropriate salary levels. The results of negotiations of Union contracts shall be consistent with the wage and salary objectives for nonunion employees. The system of wage and salary administration shall be designed in a manner which contains incentive for employees to continue to improve their performance, growth and development.

### MANAGEMENT & LEADERSHIP

To encourage, support and create the opportunity for Directors and employees who understand and accept cooperative philosophy to develop the management and leadership skills required for the application of the principles, tools and techniques of modern management to a vigorous and dynamic cooperative enterprise.

### 1. Board of Directors -

- a. Qualifications and Participation The membership of the Cooperative shall be informed on a continuing basis of the qualifications, skills and time required for effective fulfillment of director responsibility. All members of the Board of Directors shall be provided the opportunity and encouraged to participate in director orientation and training programs. Opportunities for members of the Board of Directors to represent the Cooperative at meetings of associated organizations shall be provided on as widespread a basis as possible. The conduct of Board meetings shall be in such a manner as to achieve open and widespread participation in Board discussions and decisions by all members of the Board of Directors.
- b. Board Performance To assure continued effective performance by all members of the Board of Directors, there shall be conducted, annually, an appraisal of the Board's responsibilities and performance by the Board itself. This appraisal process should result in the identification of training and development needs of both the Board of Directors and individual members of the Board.
- c. Board-Manager Relationships There shall be in effect a policy describing relationship of the Board of Directors with its General Manager. This policy shall include a statement of specific delgations by the Board to the General Manager and shall be reviewed at least annually to assure mutual understanding. The Board shall, annually, systematically appraise the performance of the General Manager and develop with him a mutually acceptable plan of action for his continued growth and development.
- d. Consultants The Board of Directors, working with the General Manager, shall identify and secure outside consultants as are necessary to assist them in properly fulfilling their functional responsibilities. The Board shall provide for direct reports from consultants to the Board of Directors which contain recommended courses of action and advice and counsel to the Board before decisions are made.

#### 2. Employed Management

Qualifications - There shall be established in written form clearly defined responsibilities for the General Manager and all members of the Management Staff. These shall be accompanied by a written statement of qualifications and personal characteristics required for each Management position with the Cooperative. There shall be established and conducted a program of appraisa and performance evaluation of all members of Management to assure continued growth and evelopment.

### Management and Leadership--

- b. Management Philosophy The possession of a knowledge of, and commitment to, cooperative philosophy is required on the part of all Management employees of the Cooperative. In addition, commitment to a Management philosophy which recognizes the necessity for the team approach to accomplishing goals should be incumbent in all members of Management.
- c. Training and Development There shall be established a process for identifying Management training and development needs and for providing Management training opportunities on a planned and scheduled basis.
- d. Allied Organizations The General Manager shall develop and maintain a planned schedule of Management attendance at meetings of allied organizations. It is expected that the General Manager will take advantage of opportunities for his active involvement and participation in such organizations to represent the Cooperative's philosophy and point of view and to influence plans and decisions of these organizations.
- e. Board Leadership The General Manager shall be expected to make plans for meetings of the Board of Directors and through information, reports and presentations, he will be expected to assume a leadership position with the Board of Directors.

# MEMBER RELATIONS

To achieve widespread understanding, participation and involvement of the member-owners in the affairs of their Cooperative and provide them a real sense of ownership through a true demonstration of cooperative principles and the democratic process.

- 1. Member Participation and Support There shall be a planned program of member activities and services designed to achieve the participation and support of the members in the Cooperative. Provision shall be made to determine, periodically, member attitude and reaction to the Cooperative. Results of these determinations shall be carefully studied to determine appropriate changes and revisions in member-related programs and activities.
- 2. Member Information The Cooperative shall utilize its monthly newsletter and other publications to most effectively communicate with the membership and to inform them of new programs and developments. These publications and other communication media shall be utilized in a manner that will provide the most information and the maximum understanding by the members of the Cooperative.
- 3. Minuteman Program The Cooperative shall maintain an active on-going Minuteman program which provides for the more detailed involvement and discussion of the Cooperative programs and activities by an ever-expanding group of members.
- 4. <u>Democratic Control</u> The Cooperative bylaws and all Board and operational policies shall be evaluated to assure that there exists among the members the maximum opportunity for the exercise of the Democratic process. This concept shall apply equally to the Board's conduct of its own operations.
- 5. Member Attitudes and Needs There shall be established a process for surveying and analyzing the attitudes and desires of the members in terms of existing programs and services. The results of such surveys shall be interpreted in terms of necessary new or revised programs and services.
- 6. Member Requests & Complaints Requests and complaints received from members shall be processed on a satisfactory and timely basis. There shall be established within the Cooperative procedures for properly channeling such requests and complaints to appropriate personnel and, in addition, there shall be established a single overall control process for evaluating the effectiveness with which member requests and complaints are being handled.

# CORPORATE CITIZENSHIP RESPONSIBILITY

To assume a leadership position through recognizable efforts and actions designed to enhance the social, cultural and economic status of those living in the rural community, to secure favorable public opinion and understanding of the activities and programs carried on by the Cooperative and to develop the legislative support needed to permit the continued pursuit of our objectives.

## 1. Legislative Relationships -

- A. State and Local There shall be specific programs developed and carried out which are designed to communicate the needs and interests of the Cooperative to state and local elected representatives and governmental officials. Our communications with them shall be of such a nature that will permit the determination of their reaction to, and support of, the needs and interests of the Cooperative.
- B. <u>National</u> Effort shall be made to establish and maintain effective relationships with elected representatives to the National Congress. Other officials in government departments, or in the executive branch, shall be made aware of the needs of the Cooperative and this area for services available through their national offices. The General Manager shall be expected to report periodically to the Board and to enlist the Board's assistance and involvement in the establishment and maintenance of these important relationships.
- 2. Public Relationships The Cooperative recognizes the importance of a favorable public image and the conduct of its operations may be influenced in an attempt to establish and maintain this favorable image. Most important in this process is the periodic determination of the Cooperative's image with the public. In addition, recognition will be given to the need for directors, the management and employees of the Cooperative to participate in worthwhile community endeavors and to provide leadership to these endeavors whenever possible.

#### B. ELECTRIC SERVICE

#### 1. Availability

We have attempted to reflect in this plan our best estimate as to the new construction and service rebuild activities that will take place in 1973. Because of the dynamic growth that is taking place in the Sioux Falls and Brookings areas, it is extremely difficult to forecast this with any degree of accuracy. Nevertheless, here are our best estimates:

#### New Construction

<u>Total</u>	<u>n/g</u>	<u>0/H</u>
10	2	8
190	170	20
20	14	6
34	4	30
1	1	0
35	0	35
3	. 0	3
15	0	15
0	0	0
308	191	117
250	0	250
	10 190 20 34 1 35 3 15 0	10 2 190 170 20 14 34 4 1 1 35 0 3 0 15 0 0 0 308 191

<sup>\*</sup> Includes 120 mobile homes.

#### Service Rebuilds

Type	Total	. <u>U/G</u>	<u>O/H</u>
Farm	150	30	120
Rural Residence	12	5	7
Urban & Suburban	12	10	2
Commercial	6	. 3	3
Public Buildings	3	3	0
Cottages	8	1	7
Total	191	· 52	139

The estimated costs of the above construction activity are contained in the capital budget section of "Distribution Plant Additions".

### 2. Type

We plan to review our criteria for determining the application of underground to our system additions requirements. The board policy regarding the application of underground needs to be reviewed along with comparative cost data based on our experience in installing both overhead and underground facilities. A detailed report on this will be made to the board at the May board meeting.

### 3. Timeliness

With the uncertainty as to the type and amount of new construction to new consumers there is a need for a different and more flexible arrangement of our construction personnel. The details of this study are outlined in the "Productivity" section of the work plan. Specific standards are being established for defining the maximum amount of time that should elapse between the time we receive a request for service and when our construction is completed. There is a need for improved coordination of engineering, materials and supplies procurement and the scheduling and completion of the construction. All of this will be required to permit us to meet our timeliness goal.

#### 4. Technology

I am of the opinion that we are making application of most of the modern technology available to rural electric distribution systems. We plan, however, to give increased attention to assuring that current plans and specifications are available for all types of construction.

#### 5. Quality

We plan to continue our monthly voltage and current readings on each feeder out of each substation. We need to improve both the amount of data and the quality of our analysis of this type of data. It is planned that a computer program will be designed so that this monthly data can be analyzed on the computer and interpreted by the Engineering department. We expect this process to be in effect by July 1, 1973.

#### 6. Continuity

It appears that our service continuity record will be well within the 3.5 hours per consumer of outage time in 1972. Although we feel that our continuity of service performance meets high standards, we feel the need for a more detailed evaluation and analysis of the cause of our unplanned service interruptions. Here again, we plan to make use of the computer for compiling data on service interruptions. This data also will be interpreted by the Engineering department and the process will be in effect by July 1, 1973.

#### 7. Capacity

We have in the past based our decisions regarding the construction of additional capacity on specific consumer complaints and the results of the annual voltage and load survey. We feel that we need a better system of tests and measurement of load conditions and we plan to institute such a program in 1973. This will consist of periodic measurements of specific feeders, lines and services as prescribed by the Engineering department. The Engineering department shall utilize data gathered from their quality and continuity studies mentioned above. We also plan for more effective utilization of voltage regulators, boosters and capacitors.

### 8. Engineering

Beginning in 1972 the Engineering department assumed a broader role in developing plans for and prescribing major operations and maintenance programs. This, coupled with the increased engineering work in connection with an expanded construction program, indicates the need for an additional employee in the Engineering department. This new employee will assist with some of the more routine engineering work and be used primarily in the office. In addition to the specific programs outlined below, the Engineering department plans to become more involved in construction supervision, the monitoring of construction costs and the control of the entire construction work process. Major O&M programs that are planned are as follows:

- a. Pole Plant Maintenance We plan no specific pole treating program for 1973. However, there is provision for spending time with our pole consultant to evaluate the status of our present pole plant program and to conduct a small amount of pole inspection sampling.
- b. Right-of-Way Maintenance We conducted a line patrol of our entire system in November of 1972 and this indicated that approximately 60,000 feet of right-of-way clearing was required. We expect that with new construction clearing and additional right-of-way work to be discovered during the year that our right-of-way crew will again accomplish about 100,000 feet of right-of-way clearing.
- c. OCR Maintenance We plan to take monthly counter readings on all OCR's on the substations and twice during the year to take counter readings on all of our line oil circuit reclosers. We estimate that 250 OCR's will require maintenance and that this will be accomplished during the fourth quarter at an average cost of \$25 each.
- d. Meter Check and Maintenance All three-phase and large power meters will be checked for connection and accuracy during 1973. Either one of our employees will become qualified to make these checks as a meter technician or this activity will be contracted out. The availability of qualified manpower and estimation of this. We also

#### RESULTS REPORT:

Our performance in the area of Electric Service can be determined based upon reports of the completion of planned programs according to schedule and when there is a detailed overall report on the Electric Service key performance area prepared and presented to the board during 1973.

### KEY PERFORMANCE AREA REPORT

#### ELECTRIC SERVICE

April, 1973

#### **OBJECTIVE:**

To provide the member-consumers of the Cooperative with central station electric service which meets the highest industry standards in terms of availability, quality, and continuity utilizing modern technology and in amounts necessary to adequately meet their ever-expanding power requirements.

1. Availability - The policies and practices of the Cooperative must be such as to make available service from the Cooperative to any consumer who desires our service and who is legally eligible to receive it.

Board Policy 320.1 commits the Cooperative to extend service to any consumer in our service area, except those that are not legally eligible to receive such service. The not-legally eligible group comprises three categories, viz.:

- (a) Those consumers already served by another supplier. The "law" in this case is REA policy. Unless ineligible under (b) or (c) below, this category of consumer can receive service from the Cooperative if a court of competent jurisdiction declares him eligible, or if he is released by his present supplier.
- (b) Those consumers already served by another supplier in an area where he is "frozen" to his present supplier under provisions of state law.
- (c) Those newly-created consumers that are in an area where the Cooperative, under the provisions of state law, cannot serve. In all cases, these consumers would be within the limits of an incorporated city. (However, not all new consumers located in an incorporated city are thereby automatically ineligible.)

In practice, there are no known cases wherein a would-be consumer, who was eligible and made application, has been denied service. All applicants, if eligible, are served, without regard to the distance from existing lines, or any other factors, including size of investment required to serve, or amount of expected revenue.

2. Type - We must keep aware of, and apply, modern technology in utility practices and offer electric service of the type required by present and potential electric consumers.

In addition to expanded power requirements, consumer needs have changed to require higher and more consistent service voltages.

Service voltages offered by the Cooperative include all nominal standard voltages, from 120 volts to 12,470 volts. We are also prepared to provide service at non-standard voltages, if given enough lead time to procure the special equipment that would be needed. All voltages are available in single-phase and three phase, and in any combination required by the consumer.

3. Timeliness - Consumers requesting service from the Cooperative shall have electric service made available to them according to the consumer's needs, whether this service be of a temporary or permanent nature. Plans and programs of the Cooperative shall reflect an anticipation of the seasonal changes in demand for service from the Cooperative.

Engineering and CO&M Work Plans for 1973 call for an average of three weeks after receipt of request for service, and a maxi-mum of four weeks until service is made available. Special loads, such as EROS, for example, are of course exceptions to this general rule.

Past performances, in respect to new consumers, has been good. We know of no consumer who suffered unduly because of construction delays. Where necessary or desirable, we will loan the consumer a stand-by plant. Delays have been, and are, more common where service capacity needs to be increased. The difficulty here lies in making a judgement as to how urgent the "rebuild" is needed, and misjudgements are, inevitably and on occasion, made. However, we deem the present rebuild situation satisfactory from a standpoint of timeliness.

Present indications are that 1973 may see a greater number of new extensions than initially estimated. With the addition of another position in the Engineering Department, and the reorganization of the Construction Crew, we expect we will be able to meet our timeliness goal. Given vigorous effort, this should be attainable even if the increased number of applications comes to pass.

During 1972, we built to 255 new consumers and increased capacity to 225. Through March of 1973, we have extended service to 46 new consumers and increased service capacity to 57. With one exception, these were all completed reasonably within consumer time requirements. In the one exception, the consumer suffered three outages before we rebuilt his service.

4. Technology - The design of new distribution facilities shall include the application of up-to-date methods, techniques, and equipment and be consistent with currently approved policies regarding the extension of electric service and the utilization of currently applicable apparatus and equipment. There shall be provision for periodic reports of compliance with such policies and there shall be available currently applicable plans and specifications for all type of approved distribution system construction.

We are keeping abreast of, and utilizing the latest proven tools, techniques, and equipment. Change in underground techniques and technology is especially rapid, and we apply improved equipment as it is approved and proven. The CO&M Department now has three basket-type maintenance trucks which are rotated among the crews on a periodic basis.

As our experience with underground distribution accumulates, we find our design changing to increase operational convenience. For example, we find that early underground lines do not have enough above-ground switching access points. This makes for difficult outage location and repair. Underground lines are now being designed to provide a switching access point at every tap, every transformer, with a minimum requirement of one point to the mile.

REA has not been able to keep up with the need for new specifications (drawings) of underground assemblies. However, we design our own, when required, and no trouble has been experienced in obtaining REA approval. As an example, there are three places on our underground system where we must install oil circuit reclosers (on the surface, in an enclosure). As yet, REA has no specifications for this. We will be designing our own and installing them during the summer of 1973.

5. Quality - The quality of the Cooperative's electric service shall be such as to comply with accepted industry standards and, in particular, the standards described in REA Bulletin 169.4.

"Quality", in the case of electric service is, practically speaking, synonymous with "voltage level". In other words, the level, and consistency of level, of voltage, compared to nominal. REA standards, as set forth in Bulletin 169-4, require compliance with American National Standards Institute standards. These standards specify two permissible voltage ranges, "A" and "B". Although the table shown below oversimplifies the standards as they are written, it presents a fair generalization of the standards as they would apply to a system like Sioux Valley's.

Range	Minimum		Maximum	
	At meter	At outlet	at meter	at outlet
Α	114	110	126	126
В	110	106	127	127

With regard to Range A, the standards specify that "Electric supply systems shall be so designed and operated that most service voltages are within the limits specified for this range. The occurrence of service voltages outside these limits is to be infrequent." (Note: "Service voltage" means voltage at the meter. Voltage at outlet then is a function of consumer wiring).

Range B "--- includes voltages above and below Range A limits that necessarily result from practical design and operating conditions ---. Although such conditions are a part of practical operations, they shall be limited in extent, frequency and duration. When they occur, corrective measures shall be undertaken within a reasonable time to improve voltages---to Range A---."

Reduced to its essential, then, the standard says "Stay within Range A when possible. Stay within Range B at all times, and when outside Range A, return to A as soon as practicable."

From these standards, REA has created a complex table of recommended voltages, wherein the recommended minimum voltage at the meter pole would be 114, the maximum 126, and the maximum swing of eight volts.

Our own standards are stricter than these - we strive for a minimum of 116, a maximum of 126, with a maximum swing of 8 volts, at the consumer's meter pole. In other words, if a consumer's minimum voltage at the meter is 116, his maximum should not exceed 124. If this maximum is 126, his minimum should be not less than 118.

Both REA standards and our own standards fall within Range A. However, it may be that our performance, during the 1972-1973 peak, will fall into Range B, since we plan no system improvements this year. This is permissible, within the standards, and we expect no intolerable voltage levels to develop.

Since our wholesale power supplier owns the substation and substation regulators, we must look to them for proper voltage at the substation, except that we control the regulator settings. Additionally, our role in maintaining proper voltage levels includes:

- (a) Installation, maintenance, and proper adjustment of voltage regulators in the line.
- (b) Installation and maintenance of capacitors at appropriate places along the line.
- (c) Periodic sample measurements to verify proper voltage levels.

When voltage levels fall, or are forecasted to fall, outside of standard limits, action must be taken. Action here means investing money in lines and equipment to maintain standard conditions. Whether the money should be spent for heavier lines, more substations, regulators, capacitors, or a combination is a function of power costs, money cost, and material costs. Since all of these are changing rapidly upward, but at different rates, we may see a change in emphasis between the various alternatives. At this time, though, it appears that delaying line and substation investment and making do, for a while, with regulators and capacitors will continue to offer the lowest annual costs.

Another voltage problem that can occur, not treated above, is "flicker". This is a rapid, usually large, voltage fluctuation, and is caused by individual large load characteristics. These are special problems and are solved on an individual basis as they arise. There are no widely accepted standards relating to "flicker" levels.

6. Continuity - The distribution system shall be operated and maintained in such a manner that the frequency, type, and duration of outages, the recording of outage data and the institution of remedial action shall comply with the provisions and standards contained in REA Bulletins 60-7 and 161-1. The standards of these bulletins shall be considered as minimum.

Bulletins 60-7 and 161-1 treat the subject of service reliability in general, but set no actual standards. REA standards are a maximum of 6 hours per year per consumer. Here again, our standards are more strict, the Work Plan calling for no more than 3.5 consumer-hours per year per consumer, with no consumer suffering a single outage of more than 4 hours.

Activities are designed to minimize the total number of outages, the length of outages, and the number of consumers affected by each outage. These activities include:

- (a) OCR maintenance
- (b) R-O-W maintenance
- (c) Line patrol
- (d) Preventive line maintenance

OCR maintenance is planned for 250 units in 1973. In R-O-W maintenance, we plan to clear 115 units of R-O-W. This amount of R-O-W clearing comprises a minimum of 1648 trouble spots, as determined from last fall's line patrol. In those places where clearing is not feasible, we plan to remove or relocate line to alleviate the problem.

Two line patrols are planned for 1973, and preventive line maintenance will be performed as the need comes to our attention.

Outage time in 1972 was 3.5 hours per consumer, through March of 1973, it has been .20 hours per consumer.

7. Capacity - The capacity of the Cooperative's distribution system shall be managed in a manner that assures adequate capacity to meet daily and seasonal peak load requirements and also assures that individual transformer and service capacity requirements are being properly anticipated and adequately met. The capacity of the system shall be designed to reflect the effective application of voltage regulators, boosters and capacitors, in addition to multi-phase lines and conductor capacity.

The overall capacity of the system is evaluated each year by the consulting engineer. Bases for this evaluation are monthly substation loading readings, Voltage and Load Survey readings, and KWH consumption data. Although the evaluation has not been made for 1973, we anticipate that no major system improvements will be required to serve Cooperative goals.

In the past, no formal effort has been made to predict or anticipate requirements for increasing capacity of individual services. The 1973 Work Plan calls for the establishment of a transformer size record. This, in connection with a program to compare individual transformer size with KWH consumption will provide some indication of possible impending capacity increase need. However, it cannot predict the quantum increase in load that a consumer experiences with, say, the addition of a 25 HP crop dryer to his operation. These cases can partially be caught by watching wiring affidavits and requesting consumers (through the newsletter) to notify us of planned large-load additions. Wiring affidavits are routinely watched by Engineering to catch large additions.

8. Engineering - The engineering function shall be conducted in such a manner as will permit professional interpretation of current operating statistics and data, as well as appropriate information regarding system performance and condition. Engineering services shall be performed on a timely basis, shall utilize approved plans and specifications, the pro-

visions of REA policy bulletins and shall be consistent with Cooperative policy. The Engineering Department shall provide inspection of completed construction and the evaluation of construction costs compared to approved specifications and standards.

The 1973 Engineering Department Work Plan contemplates management of the function fully as described in the paragraph above. New to the function will be the following:

- (a) Inspection of work orders
- (b) Evaluation of work order costs

These new activities will begin after the additional employee budgeted is obtained.

# ADVANTAGES OF RESULTS APPROACH

- 1. Better understanding of organization objectives.
- 2. Interpretation of objectives in terms of results expected.
- 3. Serves as a test of the appropriateness of work plan goals.
- 4. Easier for management to identify and concentrate on goals to assure their timely accomplishment.
- 5. Better overall understanding of budget requirements and their relation to work plan goals.
- 6. Better identifies those areas and activities that need to be measured and how best to measure them.
- 7. Better and more understandable KPA reports.

#### NEW DEVELOPMENTS IN MANAGEMENT

Ву

#### Harold Koontz

- I. The Increased Importance of the Managerial Role.
- II. The Growing Science Underlying Managing.
- III. The New Programs of Managing By Objectives.
  - 1. The essence of managing by objectives is verifiable goals.
  - 2. Strengths of managing by objectives.
  - 3. Weaknesses and shortcomings.
- IV. Managing By Objectives Has Led to Better Appraisals.
- V. Managing By Objectives Has Led to Certain Organizational Developments.
  - 1. Slightly increased organizing around marketing channels.
  - 2. Better focussing of staff work on objectives.
  - 3. More extensive use of end-result organization: Project management, grid/matrix structures.
- VI. Organizational Developments and Demise of Certain Fads.
  - 1. "Free-form organization".
  - 2. The group chief executive.
  - 3. The "big picture" syndrome at the top.
- VII. Recognition of the Systems Approach to Managing.
  - 1. Recognition of plans as networks.
  - 2. The problems and failures of developing information systems.
  - 3. The unsolved problem of procedures planning and control.
  - 4. Discouragement and slowness in using operations research.
  - 5. Replacing of long-range planning with strategic planning.
  - 6. Getting around the deficiencies of feedback in control.
  - 7. The potential of the new decision theory: decision trees and risk theory.
- VIII. Disappointing Results from Voluminous Behavioral Science Research.
  - 1. Increased certainty as to motivation.
  - 2. Job "enlargement" has become "job enrichment".
  - 3. The limitations in managerial training from sensitivity and leadership training.
  - 4. Recent awakening to the managerial shortage crisis.
  - 5. The promise of human resource accounting.
  - The rising prominence of organization development.
  - 7. The encouraging use of the assessment center.

- IX. The Intensively Sought After Area of Social Responsibility.
  - 1. Social and environmental pressures.
  - What is the responsibility of business and other enterprises?
  - 3. The need for environmental forecasting.
  - 4. The need for a social audit.
- X. The Increasing Sophistication in Tools of Planning and Control.
- XI. What is Needed for Effective Managing.
  - 1. The problem of managerial obsolescence.
  - 2. An awareness of the changing role of the manager.
  - 3. Need for accelerated and continuing management development.
  - 4. Need for compression and easier transmission of new knowledge to operating managers.
  - Need for increased management research and development.
    - (1) The fewness of managerial inventions despite their importance for productivity and satisfaction.
    - (2) The present low level of research.
    - (3) The need for useful, reality-oriented, research and development and new managerial inventions.

# MANAGEMENT ISSUES FOR RURAL ELECTRIC COOPERATIVES: 1972-1982

By

#### Harold Koontz

#### I. The Basic Role of the REC Manager.

- 1. The basic job of all managers in all kinds of operations and enterprises and at all levels is to design and maintain an environment for the effective and efficient performance of individuals working together in groups toward the achievement of enterprise goals.
- 2. This involves not only the selection of objectives or goals and means of accomplishing them, but their selection and plans to accomplish in the light of department or enterprise strengths and weaknesses and especially in the light of our entire external environment economic, technological, political, social, and ethical.
- 3. The major elements of the manager's internal environment design are:
  - A commonality of understood purpose goals or objectives that are verifiable, actionable, understood.
  - (2) An intentional structure of roles intentionally structured not haphazard, clear, interrelated. People must fill roles and an organizational role to be meaningful should include: (1) verifiable goal or goals; (2) clear end-result areas for which a person is responsible; (3) clear definition of the area of discretion (authority); and (4) relevant information.
  - (3) Removal, to the extent possible, of obstacles to individual performance.
  - (4) An environment leading people to perform, preferably because they want to do things, often because the environment leads them to perform in certain ways, sometimes because they must.
  - (5) An environment of clarity of objectives, goals, policies, procedures, programs, delegations, controls, etc.

## II. Social Responsibility and the "Surplus" Coal.

- 1. Every manager in every part of every enterprise must have a "surplus" goal and motive i.e. to attain purpose with a minimum of material and human (time, dissatisfaction, discomfort) resources, or to attain as much as possible of the end-results entrusted to him with the resources available to him. This is essentially what the "profit" motive in business is and, even though the REC's apparently do not have profit-making as a goal, they must have a "surplus" goal.
- 2. A "surplus" goal implies:
  - (1) Goals that are verifiable.
  - (2) Productivity being in our own and society's self interest.
  - (3) Pursuit of "surplus" being in the light of, and responsive to, our entire external environment.
- 3. Social responsibility requires efficient and effective pursuit of enterprise purpose, whatever it may be, while being responsive to the entire environment economic, technological, social, political, ethical. Note that the impact of community forces is expected to increase in the REC's.

## III. Making Planning for the Future Effective.

- 1. Since plans, to be meaningful, require actionable objectives, goals must be verifiable, i.e. at the end of a goal period we must be able to look back and say whether or not a goal has been accomplished. This is the essence of managing by objectives and an effective managing by objectives system requires:
  - (1) Adequate teaching of the nature and philosophy of the system.
  - (2) Giving managers adequate tools to develop their objectives clear organization and delegation, pertinent planning premises or assumptions, policy guidelines, understanding of company objectives and superior's objectives and operating needs.
  - (3) Clear identification of end-result areas.
  - (4) Recognition of the network nature of goals how one manager's goals interrelate to those of another.
  - (5) Insistence on verifiability.
  - (6) Making goals attainable with "stretch" or "pull".
  - (7) Making goal setting joint between superiors and subordinates but with the superior having approval power.

- (8) Making the time-span of goals appropriate to the goals rather than only to accounting periods.
- (9) Maintaining review and counseling in setting of goals and in progress toward goal accomplishment.
- 2. So that objectives and plans to reach them can be truly responsive to the total environment and since plans operate in the future, the most effective planning requires environmental forecasting. This means, to the extent possible, the forecasting of future economic-market, technological developments, and political and social forces. While economic-market factors have been the subject of extensive forecasting efforts and technological forecasting is now being developed, only recently has any serious effort been made to forecast political and social forces. Forecasting may be relatively crude and simple or it may be sophisticated. But any enterprise can make useful efforts in this direction.
- 3. To make long-range planning effective, one must do more than undertake studies. Nothing is truly a plan until a <u>commitment</u> is made (i.e. a decision) to obligate money, materials, personnel, direction, or reputation toward the accomplishment of a program. Some guidelines for effective long-range planning are:
  - (1) Attempting to foresee, as credibly as possible the commitment involved in decisions taken today. Thus, long-range planning is not planning for future decisions, but planning the future impact of today's decisions. Also, logically, the time to plan ahead will determine how far in the future a decision made today will commit us. There is, therefore, no automatic time period, such as 5 years, but rather the time period depends upon the subject area of commitment and the degree of flexibility (ability to change direction without undue cost or other harm) that can economically be built into a planning program.
  - (2) Long-range planning staffs and studies must be tied into the current decisions of operating managers.
- 4. Staffs can be used effectively in assisting in planning but they seldom are. Recognizing that staffs exist to furnish expert advice and analysis, we can use them effectively by:
  - (1) Making them responsible for obtaining and coordinating environmental forecasts.
  - (2) Making them responsible for formulating, obtaining management approval of, and disseminating planning premises.
  - (3) Having them review, evaluate, and make recommendations to top management on all proposals involving important management commitments.

- (4) Making them available in an advisory role to operating managers in their major planning activities and decision making.
- 5. Financial planning is especially important since the ability to finance programs and operations and to keep an enterprise financially sound is essential to successful operation and growth. Financial planning includes forecasting and controlling operating revenues and expenses and forecasting and controlling the flow of cash. With the high cost of electrical and telephone capital expansion and the tendency of the private utilities to require help from the cooperatives, this is especially important to the REC's. Since all operations and plans of an enterprise can be summarized in financial terms, the area of financial planning is far more than mere accounting for money. Financial statements and plans are the "windows" through which all operations and programs can be viewed.
- 6. If planning is to be effective, the natural human resistance to change must be encountered. To do so requires, among other things:
  - (1) Developing a tradition of change.
  - (2) Involving affected people in planning change.
  - (3) Taking care that people are not adversely affected by change.
  - (4) Having change develop from accepted impersonal principles.
  - (5) Having change based on planning rather than on experimentation.

#### IV. Making Operational Decision Making More Effective.

- 1. The key to effective decision making is for every manager to see himself as a "professional rationalist" since making decisions, indeed planning itself, involves a rational approach to the selection and accomplishment of objectives. To be rational requires:
  - (1) Clear goals.
  - (2) Clear understanding of the courses by which goals can be reached under existing circumstances and limitations; this means identification of the most promising alternatives.
  - (3) The ability to analyze and evaluate alternatives in the light of the goal sought; since we cannot look at everything, the effective decision maker will follow the principle of the limiting or critical factor, that is, he will identify and analyze for those variables which make the most difference to the solution of a problem.

(4) A desire to optimize.

Since limitations of information and analysis normally make perfect rationality impracticable, the decision-maker usually is engaged in "bounded" rationality.

- 2. One of the newer emphases in decision making is the use of systems approaches. This involves a special effort to see variables and limitations in a problem area as interconnected and interrelated and to recognize that there are seldom tight boundaries in a problem situation. Perhaps the best example of a systems approach is to utilize the techniques of operations research. This useful tool has been seldom used for managerial decision making and planning because the experts in the field have over-emphasized the mathematical aspects of it. The practicing manager need not be concerned with mathematical niceties, but can delegate mathematical model building. He needs only to know:
  - (1) The concept of the model a representation of the problem.
  - (2) The need to identify goals sought and measures of effectiveness.
  - (3) The identification of important variables and constraints.
  - (4) The purpose and use of mathematizing the model.
  - (5) The need for quantifying variables and constraints.
  - (6) The use of certain statistical techniques and formulas for supplementing areas where data are not available.

This approach can be one of the most powerful and useful means of integrating purchasing, inventory control, warehousing, stores, and distribution of materials.

3. While electronic data processing systems have been widely used for automating procedures - customer billing, payroll, purchasing, etc. - they have not been widely used for decision making nor has the mass of data developed by the computer led to as much information as one would wish. Data are not automatically information since data are not information unless they truly inform someone what he needs to know to do his job. There are many reasons for this state of affairs and much a practicing manager can do to make far more effective use of the computer.

#### V. Organizing for Effective Future Management.

1. Any enterprise needs to plan its future organization structure since this furnishes the future requirements for the kinds and qualifications of people. Too many enterprises, especially those that grow, put individuals in positions they can fill today but for which they may not have the qualifications for tomorrow. But organization planning requires planning the nature of the enterprise, since the purpose of an organization structure is to furnish a system of roles for people to fill and these depend on what the enterprise will do and be.

- 2. One of the major necessities for a growing enterprise is to delegate authority effectively. This involves spelling out for each manager and each subordinate a clear area in which he can use his discretion. The principles of delegation are simple:

  (1) delegation by results expected; (2) maintaining, to the extent possible, unity of command; (3) realizing that delegation of authority is not delegation of responsibility; (4) realizing and practicing the fact that a person cannot be held responsible for more than his authority, nor should he be held responsible for less; and (5) decisions within the authority competence of a manager should not be made at a higher level. However, the art of delegation the area where most managers fail is much more difficult to practice. Some suggestions for practicing the art of delegation will be discussed.
- 3. One of the major problems of a growing enterprise is to decentralize disperse throughout the organization structure authority without loss of control. This requires:
  - (1) Delegating authority for certain matters while holding final decision-making authority over the most important at the top of the organization.
  - (2) Establishing policies to guide subordinates in their decision making.
  - (3) Exercising effective control while not interfering with delegated authority; this becomes particularly important if, as Kabat prophesied, the 1982 general manager will spend less of his time on internal REC matters.
- 4. With growth in any enterprise, new departments may be expected. Kabat anticipated that the REC's will develop stronger and larger departments in the areas of finance and information services, public relations, organization planning and personnel, and community and industrial development. These newer and larger departments are reasonable to expect. But their addition and expansion give rise to problems that may be largely avoided by doing the following:
  - (1) Taking care to assure that service departments really serve those operations they are designed to support and that, where their service is to support an operating department, appropriate expense charges be made to the operating department.

- (2) Carefully distinguishing between the role of the special departments by noting when they are staff giving advice, when they have a limited authority over operating departments, and when they are operating special activities (e.g. accounting, personnel training, public relations releases).
- (3) Making certain that people throughout the organization clearly understand the role of the staff-service departments.
- (4) Taking care that staff-service departments do not undermine the work and authority of the operating departments.
- 5. Recognize that the roles of all managers and of the REC General Manager in particular are changing through (1) change in the nature of the REC's, particularly as their customers become more urban and suburban than rural; (2) community pressures change and increase; (3) the political environment changes (e.g. the recent move toward unsubsidized interest rates by the federal government); and (4) the science and art of management become more sophisticated.
- There may be an increasing need for an "executive manager", as Kabat says, in the future, particularly for larger REC's. But this step should be taken carefully since it means a second level of command under the General Manager and may insulate him from the operating organization. However, if the General Manager of REC's is required to spend more time outside the operating organization and cannot do more than participate with the boards in making policy, this may be an appropriate move. But in this event, the General Manager should participate in rigorous monthly or quarterly review of performance and plans of his operating managers and he should make sure that his control reports furnish him adequate and suitable information. After all, he is still responsible to the board for the success of his REC. Perhaps a more effective alternative is for the appointment of an Operating Manager with responsibility for all districts and possibly the engineering and personnel departments, with the finance, public relations, and community relations departments continuing to report to the General Manager.
- 7. As has already been indicated, care must be taken to make the most effective use of staff personnel and the same must be said for consultants. These people exist to give advice through utilizing their special areas of expertise. As such, they must be listened to, must be encouraged to give advice independently, and be given access to all the information they need. Also, as may be expected in smaller REC's, certain staff and service people may wear more than one "hat". There is nothing wrong with this so long as the individuals in this position, as well as those he serves and works with, knowswhich hat he is wearing when.

# VI. Manning the Future Organization Structure.

1. As has already been indicated, manning the future organization structure requires, first, planning future operation, and, second, planning

the future organization structure. Only by so doing can we have a clear idea of how many and what kind of manpower we need in the future. Planning manpower requirements is particularly important if we intend to "grow our own", that is promote from within. But it is also important if we cannot do so, as is often the case with smaller enterprises who do not have enough positions to furnish a proper training "ladder" of positions. Only through planning do we have a chance of avoiding the danger of ending up with a "round peg in a square hole".

- 2. One major step in planning for manpower is determining the nature, requirements, and values (for pay, status etc.) of positions. While some guidelines can be given, this is one of the crudest areas of management.
- 3. Another major step in planning for manpower is to inventory our present manpower. This means appraising and classifying people to determine whether (1) they are promotable now; (2) they will be promotable with more experience; (3) they will probably be promotable with additional training; or (4) they are not promotable. An inventory also requires taking into account retirements, probability of death, and departure from positions.
- 4. Obtaining manpower for the future devolves around whether our policy is to promote from within or go to the outside to fill needs to "raise" or to "raid". If we have a policy of developing our people for greater opportunities as they arise, it should not be an automatic "promotion-from-within" policy. Rather we should operate on an "open competition" policy: that it is our policy to select the best available candidate for promotion, whether he comes from within or outside of the enterprise. But in this case, our own employees have a right to expect: (1) honest and objective appraisal of their performance; (2) adequate opportunities for development; and (3) careful consideration for any opening.
- 5. Some guidelines for effective training are the following:
  - (1) A philosophy of training and development throughout the organization.
  - (2) The existence of clear-cut development goals:
    - (a) the strengthening of existing personnel to do their present jobs better and to assure the enterprise's position;
    - (b) perpetuation of existing personnel quality so that all individuals will be best able to meet growth needs and change.
  - (3) Knowing what we hope to accomplish by training.
  - (4) Knowing who needs training and for what purpose.
  - (5) Realizing that interest and participation in development should ideally start at the top.

- (6) Utilizing training methods and approaches tailored to the individual enterprise's needs.
- 6. The key to manning is effective appraisal and appraisal of those in managerial positions is the most difficult and perhaps the most important. (This will be dealt with in a special session).
- 7. One of the important aspects of manning is the best possible selection of managers and other personnel. Mistakes in selection are easy to make and are costly not only in terms of money, but also in terms of time lost and the unfortunate impact on people who are classified as a "failure". There has been a tendency to put too little effort and expense in selection. There is a tendency to misuse common selection techniques such as (1) superficial interviews; (2) superficial group estimates; and (3) overreliance and misuse of psychological and other tests. We also often do not really do adequate recruiting so that we have the best available candidates to select for a job. We often do not adequately match position requirements with the person. For managerial positions, among the major factors to consider for selection are:
  - (1) Does he have a desire to manage? Is he aware what managing is?
  - (2) Does he have the requisite level of intelligence, analytical ability (can he "see" problems), and design ability (can he "design" solutions to problems)?
  - .(3) Does he have the ability to communicate?
  - (4) Does he possess integrity? Is he worthy of trust?
  - (5) Does he have a record of accomplishment, both in getting results and in managing?
  - (6) Can he still grow, or has he "topped out"?
  - (7) Does his personality "fit" that of subordinates, peers, superiors?
  - (8) Does he have courage?

## VII. Dealing With the Problem of Communication.

1. Every manager's job involves heavy reliance on communication. But in the REC's, with their close relationships to customers and members, as well as the community, effective communication is of the utmost importance. It is the manager's job to use communication (giving as well as receiving): (1) to fill in the gaps which inevitably exist in plans, organization definition, training; (2) to make sure that he comprehends environmental forces and influences and can inform the community of the ways his enterprise is responding to them; (3) to appeal to individual self-interests and motivation so as to assure harmonizing individual purpose with group, or enterprise, purpose.

- 2. One key to effective communication is having something to communicate. The manager who does not know such things as company plans, policies, procedures, and situations can hardly communicate to subordinates what they wish to know from him so that they can feel more secure and knowledgeable in their jobs and can accomplish their tasks intelligently and effectively.
- 3. Good communication requires that people must know who to communicate with on what. This necessitates clear organizational roles and the relationships of one position with others.
- 4. Good communicators must recognize that there are barriers to communication. These include:
  - (1) Semantics: words mean different things to different people.
  - (2) People, including managers, usually fail to listen well and listening itself is an art.
  - (3) Recognition that communication is a two-way matter and one-way (from superior to subordinate) communication is ineffective communication.
  - (4) All people have a tendency to evaluate what they hear or read in their own terms of reference and thereby filter the messages sent.
  - (5) Being aware that, if there is any way a person can misunderstand a message, he probably will.
  - (6) The fact that it is usually difficult to understand without doing, that is, being in the act. This means that participation is one of the best assurances of understanding and communication.

### VIII. Improving Managerial Control With Growth.

- As pointed out above in emphasizing delegation with growth, the fact of delegation requires effective - rather than meddlesome control.
- 2. Also, with growth, programs and plans become more dynamic and complex, factors which make control difficult.
- 3. Effective control involves the same basic prerequisites and process, regardless of what is controlled. These are:
  - Prerequisites: (a) clear and integrated plans; and (b) clear and integrated organization structure.
  - (2) Process: (a) establishing standards; (b) evaluating performance against standards; (c) undertaking correction for deviations.

- The most ideal system of control should be future directed. the problems of using accounting and most statistical data for control is that the manager is informed of deviations from desired plans after the deviation occurs, sometimes long after. And no one yet has found a means of correcting past mistakes. Even fast availability of information from modern computer technology will not completely solve this problem. The time it takes to correct a deviation after it is discovered may vary from days to months. While finding out as soon as possible when events are missing plans is better than not knowing at all, it still cannot enable a manager to make errors corrections in time. There are a few approaches to solving this problem. One is better forecasting what will happen if we do not take action. Another is through the application of the newer engineering principle (used often in process control) of feedforward control; this involves conceptualizing the system and monitoring inputs to make changes before the error can occur in the process.
- 5. Effective control techniques and information should be tailored:
  - (1) To individual jobs and plans, since each tends to be different from others.
  - (2) To the needs of individual personalities, since what a person cannot understand or will not understand, he will not use for control.
  - (3) To exceptions, not just any exceptions, but exceptions at critical points in a program.
  - (4) To be made as objective as possible so that individuals will see their errors and not regard them as based on someone's judgment.
  - (5) To the needs for efficiency in the enterprise.
  - (6) To the requirements for taking action to correct deviations from plans.
- 6. One of the great advantages of the newer systems techniques of planning and control is that they force clear planning and allow managers to see their problems. Among these are:
  - (1) Variable budgeting.
  - (2) Program budgeting.
  - (3) Financial and work load forecasting.
  - (4) Operations research simulation.
  - (5) Time-event analysis PERT or CPM.
  - (6) Feedforward control techniques.
  - (7) Decision trees.
  - (8) Risk analysis.

- 7. Control of overall performance should be distinguished from partial controls which are aimed at controlling a certain program, a given activity, or a special area of operations. Control of overall performance involves measures of the performance of an integrated area of an enterprise. The usual overall performance measures used in business are budget summaries, profit-and-loss control systems, and control through rate-of-return on investment.
- 8. Control of the quality of managers has been termed the most direct type of control because well qualified managers tend to make fewer errors and require less attention to other types of control.

# IX. Utilizing Boards of Directors Effectively.

- 1. Final authority over most enterprises, whether in business, government, education, churches, or otherwise, tends to rest in groups. Whether they are called boards of directors, trustees, or regents or whether they are referred to as commissions or legislatures, groups are normally constituted to hold the ultimate power in organization. This is usually due to the fact that, in all kinds of societies, there is reluctance to place the final power over an organization in an individual.
- 2. The basic authority of boards is to stand in the place of the real owners or other constituents who ultimately control an operation. They thus have the function of acting as trustees, of seeing that the enterprise is well managed, and of setting the major objectives toward which those in an enterprise are to work.
- 3. Boards do not really manage in the usual sense, but rather make decisions in certain major areas, by assuring that operating plans and decisions are effectively made, and watching that operating management works effectively and efficiently toward these goals.
- 4. It is of the utmost importance that the role of the board, as contrasted to that of operating management, be clearly defined. This is necessary to assure that the board be involved in those decisions and controls it should be and that it not meddle in those areas where matters should be left to operating managers. This is best accomplished by setting up a board-approved chart of executive approval authorization by which the exact organizational location and level of management decision making are defined.
- 5. In general, it can be said that boards of directors should make decisions in the following areas:
  - (1) Determination of overall enterprise objectives.
  - (2) Approval of major <u>policies</u>, such as, personnel, new product, basic marketing approaches, pricing, capital procurement, cash utilization, executive compensation and development, and public relations.
  - (3) Approval of the <u>basic</u> enterprise organization structure.

- (4) Appointment of top officers and approval of appointment of major managers.
- (5) Decisions on top management compensation.
- (6) Approval of enterprise summary budgets.
- (7) Approval of major plans and commitments.
- (8) Approval of outside auditors and legal counsel.
- (9) Approval of representatives of the enterprise.
- (10) Review of matters where member (or shareholder) approval is required.
- 6. The board must obtain information necessary for its members to undertake their proper control function of seeing that the enterprise is well managed and its approved policies and programs are being carried out.

#### HOW CAN APPRAISAL OF MANAGERS BE MADE -EFFECTIVE?\*

Ву

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Few would deny that the quality and vigor of managing make the difference in the long-run success or failure of any organized operation, whether in business, government, or elsewhere. Likewise, it has been widely recognized that managerial appraisal is the key to assuring effective managing. Yet, it is an interesting fact that, despite the giant strides made in management quality and sophistication in the past quarter century, appraisals of managers are still largely ineffectual.

Perhaps the most exciting development in managing generally and in managerial appraisal in particular has been the growing use of management by objectives in the past decade. However, even this sensible and promising approach to management is more often than not poorly conceived and implemented. Despite the excitement generated by it, by far the majority of business, government, and other organizations still evaluate managers on the basis of outmoded and discredited trait or work-quality appraisals. And even where management by objectives is done well -- as yet in a very small percentage of organized enterprises -- appraisal of performance does not necessarily measure how well a man is doing as a manager.

#### WHAT SHOULD BE MEASURED?

It hardly seems necessary to say that managerial appraisal should measure

<sup>\*</sup> Much of this paper and the suggested program of appraising managers are drawn from the book of the author on <u>Appraising Managers</u> as <u>Managers</u>, published by the McGraw-Hill Book Company in 1971.

performance as a manager in meeting goals for which a manager, in whatever position he occupies, is responsible. Yet obvious as this is, or at least should be, examination of a large number of appraisal systems used by business, government, and other organizations discloses a lack of understanding of this truism, or at least an unwillingness or inability to translate understanding into practice.

Appraisal should measure both <u>performance in accomplishing goals and</u>

plans and <u>performance</u> as a <u>manager</u>. No one would want a person in a managerial role who appeared to do everything right as a manager but who could not turn in a good record of profit-making, marketing, engineering, or whatever his area of responsibility might be. Nor should one be satisfied to have a performer in a managerial position who cannot operate effectively as a manager. Performers are sometimes "flashes in the pan" and many are the performers who have succeeded through no fault of their own.

Performance in Achieving Coals. In assessing this aspect of the manager's job, the newer systems of appraising performance against preselected verifiable goals represent the best means that have yet been devised. The criteria of this aspect of performance are a manager's goals (including the intelligence with which he selects them), the programs he devises to accomplish them, and his success in achieving them. Many who have operated under this system of appraisal have claimed that these are adequate standards and that, in the course of evaluation, elements of luck or other factors beyond the manager's control can be taken into account in arriving at any appraisal. To some extent this may be true. But there are too many cases of the sparkling performer being promoted despite these factors and the failure being inaccurately blamed.

Performance as a Manager. I would urge that performance in selecting and achieving goals be supplemented by an appraisal of a manager as a manager.

One must grant that a manager at any level undertakes nonmanagerial duties and

these cannot be overlooked. The primary purpose for which a manager is usually hired and against which he should be measured, however, is his performance as a manager and not his work as an engineer, accountant, or salesman. Therefore, one of the major bases on which he should be appraised is how well he understands and practices the managerial functions of planning, organizing, staffing, directing and leading, and controlling. For standards in this area we must turn to the fundamentals of management.

# REQUIREMENTS FOR AN EFFECTIVE MANAGERIAL APPRAISAL SYSTEM.

There are a few requirements for a program of managerial appraisal to be effective. Anyone who would like to analyze his own system would do well to weigh it against these criteria.

- the effective program must weigh both performance in accomplishing goals for which a manager is responsible and performance as a manager. It is entirely possible also that the evaluator might wish to measure a manager's expertise in nonmanagerial skills and knowledge. But a manager who does well on the two standards of goal performance and managerial performance will almost be certain at least to draw upon and mobilize expertise for results in nonmanagerial areas.
- 2. The Program Should be Operational. If an appraisal program is to be effective, it should not be an exercise separate from the operations of an individual manager. It should evaluate what a manager does in his job and not, as has been the case with traditional appraisal programs, what raters think of the man and his work habits.
- 3. The Program Should be Objective. Any appraisal program gains as it becomes more objective. Both those who appraise and those being appraised prefer objectivity. The key to objectivity is verifiability. That is, at the end of a period, can we say with certainty that something has or has not been

accomplished. The better programs of management by objectives have in large part accomplished this by making goals verifiable either in quantitative terms -- for example, dollars of sales or profit or percentage of scrap reduction -- or in qualitative terms -- for example, a marketing program having certain characteristics to be completed by a certain date. But even in these programs, as well as the program for appraising managing proposed below, complete objectivity has not yet been achieved.

- 4. The Program Should be Acceptable. Any management technique or program that people do not understand and support is likely to be ineffective. If forced to, people will give lip service and fill out forms. However, if they understand and believe in a program and see it as a means of helping them accomplish their own personal desires through contributing to group goals, in other words if they accept it, they will use it and feel a sense of commitment to it.
- 5. The Program Should be Constructive. An effective managerial appraisal program should be constructive in the sense that it helps individuals to improve their abilities and work. An effective appraisal program will not only determine how well an individual meets position requirements, as important as this is. It should do more. By pointing to his errors, weaknesses, or failures, and by giving him an understanding why these occurred, it should provide him with a learning experience or open his eyes to his needs for knowledge or training.

# DEFICIENCIES OF TRADITIONAL APPRAISAL SYSTEMS.

Despite the fact that knowledgeable managers know their defects, for many years, and even commonly today, managers have been evaluated against the standards of personal traits and work oriented characteristics. A typical system might list 10-15 personal characteristics, such as leadership, ability

to get along with people, industry, judgment, initiative, and others. It might also include such work-oriented characteristics as job knowledge, ability to carry through on assignments, production or cost results, or seeing that instructions and plans are carried out. Given these standards, the rater is then asked to evaluate his subordinates on the basis of one of five or six ratings ranging from unacceptable to outstanding.

The practical problems of these programs are well known. Ratings are highly subjective. Serious fair-minded managers do not wish to "play with people's souls" or harm a person's life or career on such subjective standards. Since any subordinate who receives less than a top rating is likely to feel that he has been unfairly dealt with, many managers rather understandably feel reluctant to give anything but high ratings. The basic assumption of these appraisal systems -- that there is a connection between performance and traits or work qualities -- is also highly questionable.

The results of such deficiencies are predictable. Most managers dislike making such appraisals and look upon doing so as a paperwork exercise that must be done because some one has ordered it done. Raters understandably tend not to be too discriminating. It is hardly surprising that a study of ratings of Naval Officers a few years ago came up with an arithmetic paradox: that of all officers of the U.S. Navy rated over a period of time, some 98.5% were "outstanding" or "excellent" and only 1% were "average."

Many attempts have been made to strengthen these rating systems. Traits have been carefully defined. For example, in one form, "judgment" was defined as "how capable is he in recognizing the significant from the less significant in arriving at sound conclusions?" Other systems encourage open-ended comments by the rater whereby he is asked to supply evidence on performance he feels is pertinent for appraisal, but the results have been disappointing in terms of light cast and discrimination shown. Attempts have been made to improve the

rating process through forcing the rater to rank his subordinates, forced choice questionnaires, and requiring listing of critical incidents. Even having ratings made by peers, subordinates, superior's superiors, and groups have not been very successful, primarily because the standards themselves are essentially nebulous.

# APPRAISING AGAINST OBJECTIVES: THE FIRST MEANINGFUL APPROACH

As noted above, the most promising tool of managerial appraisal yet practiced is the system of evaluating managerial performance against the setting and accomplishing of verifiable goals. Once a program of managing by objectives is operating effectively, appraisal is a fairly easy step. What is involved is to see how competently a manager sets his objectives, their relationship and contribution to objectives of the enterprise and its parts, and how well performance against them is achieved.

The most important advantage of such a system is that it can result in much improved managing. Actionable objectives cannot be established without planning and results-oriented planning is the only kind that makes sense.

Managers are forced to think of planning for results, rather than merely planning activities or work. It also requires a manager to think of the way he will accomplish given results, the organization and personnel he will need to do it, and the resources and interdepartmental assistance he will require.

Another strength of a well-operated system of managing by objectives is the clarification of organizational positions and structure that is almost certain to occur. It dramatizes the fact that delegation should be done in accordance with results expected and, to the extent possible, goal assignments should be consistent with a position that carries clear responsibility for their accomplishment.

Coordination of planning and budgeting is also reinforced. As many

companies have found out, its managers up and down the line find out that one manager needs to be aware of the goals of other managers. Managers find that it is to their advantage to know the goals and achievement not only of their superiors but also of those in other departments that contribute to their own goal accomplishment. The production manager, for example, would be foolish not to have his objectives coordinated with those of marketing or research and development.

One of the great advantages of a system of managing by objectives is that it elicits commitment for performance. No longer is a man just doing work, following instructions, waiting for guidance or decisions; he is now an individual with clearly defined purpose. What is more, he has had a part in actually setting his objectives, has had an opportunity to put his ideas into the making of plans, now understands his area of authority, and has hopefully been able to get a number of decisions from his superior at the time goals are agreed upon to assure that he can accomplish his goals. When managing by objectives has been done well, a man becomes master of his own fate and feels a real sense of commitment to his goals.

One of the frustrating problems in effective managerial control is selecting those critical points in any situation that a manager must watch if he is to be assured that his actions are conforming to plans. In cases of effective management by objectives, this problem is often solved. Now the manager knows what he should watch. Now he has standards against which to measure his progress. Indeed, there has probably been no development in management that has contributed so much to improving the quality of control and pinpointing information needs.

Thus, appraisal is an operational "fallout", as is shown in the following chart, from a system of managing. It need not be a world of forms and reports separate from managing. Information on what a man has done against

what he agreed was a reasonable target is readily available. Moreover, it is available in an atmosphere of the superior working with and helping his subordinate -- not sitting in remote judgment of him.

# APPRAISING AGAINST OBJECTIVES IS NOT THE EASY ANSWER.

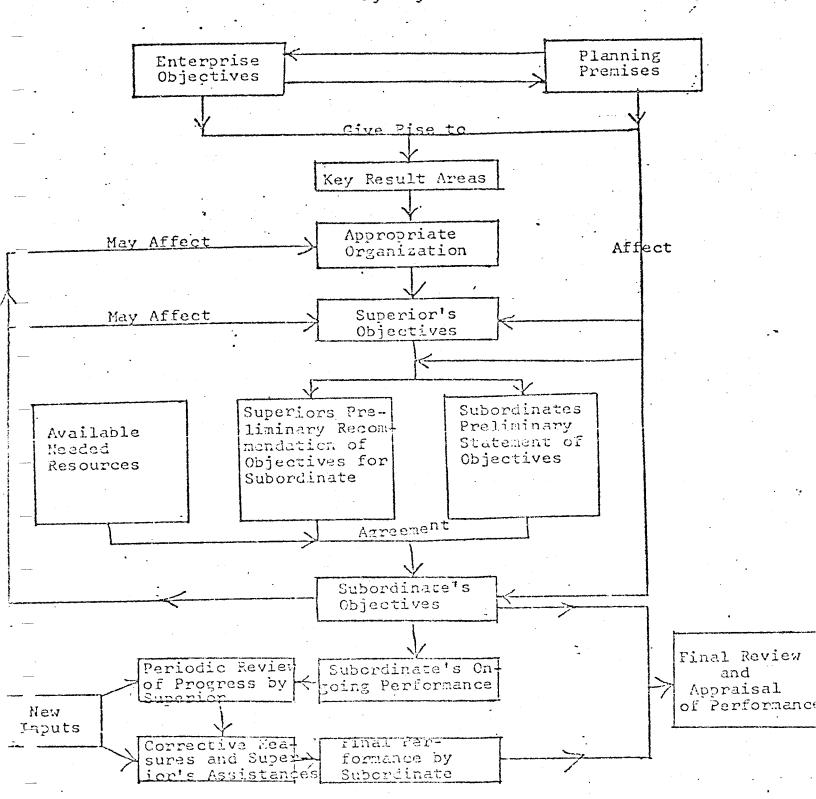
Unfortunately, appraising against objectives, as promising and sensible as it is, is not the easy answer to evaluating managers. Even the best operating program has limitations. There are great difficulties and weaknesses in practice. And, since it only measures end-result performance, it overlooks how effective a manager is as a manager.

Deficiencies in the System. Even with considerable analysis, study, and supervision, goals with the right degree of "stretch" or "pull" are difficult to set quarter in and quarter out, year in and year out. Dealing with the future and the abilities of people to perform involves inevitable uncertainties.

One of the major problems is getting objectives that are attainable but not easily so. Experience has shown that, at least in the earlier days of the program, most people tend to set goals too high. Then, after experience, and where goal achievement becomes a major standard of appraisal and sometimes a determinant of compensation or promotion, there is a natural tendency for subordinates to put padding into goals to assure that they will exceed them. The question of whether goals are adequate can only be answered by the judgment and experience of the man's superior, although this judgment can become sharper with time and trial and can take on a high degree of objectivity in those instances where goals of other managers in a similar position can reasonably be used for comparison.

In almost all systems of management by objectives, particularly where goals are used for appraisal, they are usually set for a short term, seldom longer than a year and often quarterly, or less. There is clearly a danger in

The System of Managing and Appraising by Objective



Source: H. Koontz, 'Appraising Managers as Managers.'
(New York: McGraw-Hill Book Company, 1971).

emphasizing short term planning and results at the expense of the longer term.

Critics of programs of managing by objectives feel that there may be an overemphasis on a few major objectives and that the other aspects of a man's job will be neglected. This is a weakness in the system and also a weakness due to poor practice. No workable system of managing by objectives can cover every detail of a man's job. Moreover, managing by objectives is a tool of managing and not all there is to this task.

One of the great weaknesses in appraising performance against verifiable objectives is that it is entirely possible for a man to meet or miss his goals through no fault of his own. On occasion, new products have "taken off" in a market far beyond expectations and have made the marketing effort look exceptional, when the quality of the program and its implementation were poor. Also, many are the corporate financial planners who have missed their cash procurement goals when unexpected tightness developed in a money market.

Most raters faced with this problem will declare that they always take external and unexpected factors into account. But it is extremely difficult. Can we be sure whether performance success or failure was due to luck, or factors beyond a man's control? The outstanding performer is always a "fair-haired boy," at least as long as he performs. The nonperformer likewise cannot escape having a cloud cast over him.

<u>Weaknesses in Practice</u>. Analysis of programs of managing and appraising by objectives have also disclosed many difficulties and weaknesses in practice. Learning the system is difficult. For one thing, those who have been accustomed to planning (if at all) and doing work find it difficult to shift to developing actionable objectives. Because of the difficulties in learning the system, it is urgent that people who are expected to operate under it understand the nature and philosophy of the program, what it is, how it works, why it is being done, how appraisal will work, and above all how everyone

will benefit. Like most other worthwhile programs it cannot be installed by edict and distributing forms and instructions with an order to participate.

One of the major reasons why managing by objectives does not work is, as with other kinds of planning and budgeting, the failure to give goal setters adequate guidelines. People must have some planning premises, or assumptions of the future, some understanding of company policies and the directions of other plans and objectives in order to do their planning effectively. No one can plan in a vacuum. The question will always be: What does the goal setter fill the vacuum with? Will he have supportive data or will he fill it with impressions and guesses?

One of the most important of all guidelines is knowledge of corporate objectives and strategies and how a manager's result area fits into these.

If these are fuzzy, unreal, or inconsistent, it becomes virtually impossible for a manager to tune in with them.

Another weakness is to fail to assure that goals represent a coordinated, interconnected network. A man may push achievement of his own objectives at the expense of the company. A production manager, for example, may be so zealous in accomplishing cost reduction goals through scheduling long runs of a product as to defeat inventory level objectives or the sales manager's desire to have full lines of product available at all times. What is needed, as one company has described it, is a "matrix of mutually supportive goals."

One of the sure causes of failure is for the principal to set arbitrary goals and hand them to his subordinates. There is no question that the superior must approve and have the last say on his subordinate's goals. But there is also no question that completely setting goals for subordinates is self-defeating. No one can feel a sense of commitment to objectives that are thrust on him. He may even feel a sense of resistance that may not be

expressed openly but will take the form of excuses or beating the boss at his own game. Arbitrary goal setting is also foolish in that the superior is deprived of the knowledge and experience that those who report to him almost always have.

It is clear that, if goals are to be meaningful and certainly if they are to be used as a standard of appraisal, they must be verifiable in either a quantitative or qualitative way. Because goals expressed in numbers are easily the most verifiable, there is a danger of overinsisting on quantities and numbers. We should not forget that not every worthwhile end-result can be expressed quantitatively. One of the most prominent companies in the country has a program that is simply not working at the middle and lower managemental levels, at least, because all goals at these levels are expressed in numbers. As a result, the management by objectives program of this company has become largely a "numbers gome" and the more intelligent subordinates have shown great cleverness in beating their bosses at this game.

There are still other deficiencies in practice. As often done in budgeting, some companies are inflexible in not changing objectives during a period of time, normally a year. It is true that, if objectives can be changed easily and often, they cease to be very meaningful. At the same time, if goals are materially obsolete, there is no sense in not changing them. For a manger to try to achieve an obsolete objective is as foolhardy as to have him work toward accomplishing an obsolete project.

In many programs, progress toward goals accomplishment is not adequately monitored. Particularly where goals can only be achieved in a period of a year or more, or where a company is accustomed to setting goals only at annual periods, there is a danger that a superior, for fear of interfering with his subordinate, may sit back and fail to follow up progress during the period. While not taking over the task from his subordinate, or interfering with his

operation, the superior should, of course, have adequate information to watch progress, should counsel with his subordinate, and give him assistance in solving problems and removing obstructions to his performance. Managing and appraising by objectives cannot become abdication of responsibility.

Perhaps the major problem in practice arises from seeing managing by objectives only as an appraisal program instead of a way of managing. Even though search for a better appraisal method did give managing by objectives its strongest impetus, it is likewise true that the system is not likely to work if only used as a device for appraisal. Management by objectives must be a way of managing, a way of planning, as well as the key to organizing, staffing, leading, and controlling. When it is all this, appraisal becomes only a part of managing, a summary of what has been done, and not a difficult separate operation.

# SUPPLEMENTING APPRATSAL BY OBJECTIVES BY APPRAISING MANAGERS AS MANAGERS.

As encouraging as appraisal of managerial performance against verifiable objectives is, it still leaves much to be desired. As mentioned earlier, no one interested in enterprise success for the long term would want managers who could not accomplish goals, nor would they want performers for long in a managerial role who could not manage.

A number of companies have recognized the importance of evaluating the quality of managing although these have been relatively few. Some have asked for appraisal in such broad areas as planning, organizing, coordinating, leading, motivating, and controlling. Others have broken down these areas in such broad subcategories as, in the case of organizing: job assignments, clarity of responsibilities and authorities, and delegation effectiveness. A very few companies have gone farther. One company, the St. Regis Paper Company, has aided managers in their appraisals by preparing and distributing a booklet on

<u>Guidelines for Managing</u> which is really a brief summary of basic principles of management. However, the standards thus far used for appraising managers as managers have been too broad and too susceptible to general and subjective judgment.

The program suggested here is a somewhat experimental step toward appraising managers as managers. However, it has been tested by presentation

to a number of executives in both business and government. And, above all, it has been tested in the demanding crucible of experience. In one company with three demestic divisions and five wholly owned subsidiaries overseas, it was used as a major method of appraising middle and top-level managers for five years. Coupled with a program of appraising managerial performance against verifiable objectives, it was not only the means of evaluating managers but also the basis for differentiating between bonuses paid to them.

The Program. The program involves taking each function of a manager in accordance with standard managerial analyses -- planning, organizing, staffing, directing, and controlling -- and setting up checkpoint questions under each to reflect basic principles of management. As imperfect as the basic principles of management may be and as much judgment as may be required for their use in practice, they do give the evaluator benchmarks to determine whether persons understand and are following out the basics of management. Even though application of principles to an individual manager's operations requires a degree of subjective judgment, this is far more meaningful than the general questions often used as standards of appraisal. They at least focus attention on what may be expected of a manager as a manager.

Por details concerning this program, the forms, a full list of questions used, and a summary of the experience in applying the system in practice, see Harold Koontz, Approxising Managers As Managers (McGraw-Hill, 1971).

While the total list of questions is too extensive to be repeated here, requiring 73 checkpoints over the five functions of the manager, some samples may be given. In planning, for example, a manager may be rated by such check questions as the following:

Does he set for his departmental unit both short-term and long-term goals in verifiable terms that are related in a positive way to those of his superior and his company?

Does he understand the role of company policies in his decision making and assure that his subordinates do likewise?

Does he check his plans periodically to see if they are consistent with current expectations?

In choosing from among alternatives, does he recognize and give primary attention to those factors which are limiting or critical to the solution of a problem?

In the area of organizing, such questions are asked as the following:

Does he delegate authority to his subordinates on the basis of results expected of them?

When he has delegated authority to his subordinates, does he refrain from making decisions in that area?

Does he regularly teach his subordinates or otherwise make sure they understand, the nature and operation of line and staff relationships?

Does he distinguish in his operations between lines of authority and lines of information?

In the area of controlling, such questions are asked as the following:

How effectively does he tailor his control techniques and standards to reflect his plans?

Does he develop controls that point up exceptions at critical points?

Does he keep obreast of, and utilize, newer techniques of planning and control?

Does he help his subordinates develop control techniques and information that will show them how well they are doing in order to implement "control by self control"?

Other questions are asked in these areas as well as in the areas of directing, or leadership, and staffing. Also, in order to solve the problem of semantics and understanding of terms and techniques so prevalent among managers, these who have used this system are strongly urged to use a standard book on management with page references for material dealing with each question.

Rating. In developing this system, it was hoped to make the ratings highly objective by designing the check-points and questions to be "go-no-go", that is, the manager being rated either did or did not follow the basics involved. This was not found to be practicable and degrees of "how well" had to be inserted on each question, with rankings from 0 (inadequate) to 5 ("superior"). In order to give the numerical ratings for each question some rigor, however, each is defined; "superior", for example, is defined as "a standard of performance which could not be improved upon under any circumstances and conditions known to the rater".

Other attempts to reduce subjectivity and lack of discrimination in rating include (1) the requirement in the final annual appraisal that a narrative with incident examples be given to support ratings; (2) review of ratings by the superior's superior; and (3) making the evaluation of raters themselves

dependent in part on the discrimination and care shown in their evaluations. A degree of objectivity is also introduced by the number and specific nature of the checkpoint questions. Also, it was found that encouraging self-rating and comparison with the superior's rating served to elicit discrimination and understanding; moreover, as is often the case, persons rating themselves tended to be more severe on themselves than their superior was.

Advantages of the Program. Clinical experience with the program has shown certain advantages. By focusing on the essentials of management, this method of evaluation gives operational meaning to what managing really is.

One upper level manager, who was in fact a good manager, declared after discussing his first ratings with his superior that, despite having read many books on management and having attended many seminars, this was the first time he really understood what managing is.

by use of a standard reference text for interpretation of concepts and terms, much of the semantic and communication difficulties so commonly encountered are removed. Such things as "verifiable objectives," "staff," and "delegation" take on consistent meaning. Likewise, management techniques and their proper application become uniformly understood.

The program has also proved to be a tool for management development by calling to a manager's attention certain basics that he may have long disregarded or had not understood. In addition, the approach has been found useful in pinpointing areas where weaknesses exist and toward which development efforts should be aimed. Furthermore, as intended, the program acted as a supplement and a check on appraising managers with respect to their effectiveness in setting and achieving goals. If a manager had an outstanding performance in goal accomplishment but was found to be deficient as a manager, those in charge were encouraged to look for the reason. Normally, one would expect a truly effective manager to be also successful in meeting goals.

Weaknesses in the Program. There are, however, certain shortcomings in the program. It only applies to managerial aspects of a given position and not to such technical abilities as marketing and engineering that might also be important. These, however, should be reflected in the goals selected and achieved. There is also the problem of the apparent complexity of the total of 73 checkpoints; to rate on all of these does take time, but it is believed that the time was well spent.

Perhaps the major defect of the program is the unavoidable element of subjectivity remaining. However, it still has a fairly high degree of objectivity and is certainly far more objective than the practice of having managers appraised in broader areas of the managerial functions as has been common in the few cases where serious attempts have been made to evaluate managers as managers. At least the checkpoints are specific and go to the essentials of managing.

### MOVING TOWARD MORE EFFECTIVE APPRAISALS.

After many years of frustration from utilizing trait and work oriented qualities as standards of managerial appraisal, there is at last some hope that our more alert and intelligently managed organizations are moving toward more meaningful evaluation of those to whom we trust the responsibilities of managing. Certainly, appraisal based on selection and achievement of verifiable objectives is a tremendous step in the right direction. It is such a breakthwough, however, only if it is applied with care and intelligence. It concentrates, as it should, on what a manager does rather than on what someone subjectively thinks of him. When coupled as a standard of evaluation with appraisal of a manager as a manager, there is hope that we can, at long last, begin to approach the area of evaluating managers logically and effectively.

But devices and approaches will not solve the problem. There is ever

the danger that top managers will adopt techniques and forms without accompanying them with an understanding of the philosophy back of them, without the tools and assistance subordinates need, and without the hard work, time, commitment, and leadership necessary to make them work. No management technique is self actuating and many have failed through executive malnutrition, particularly from those at the top. In the area of managerial appraisal, the results should be worth the effort required.

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HAROLD KOONTZ AND ROBERT W. BRADSPIES

# MANAGING THROUGH FEEDFORWARD CONTROL

# A future-directed view

Harold Koontz is Mead Johnson Professor of Management in the Graduate School of Management, UCLA. His coauthor is president of Design Technology, Inc., Pasadena.

Most current control systems rely on feedback; unfortunately, feedback signals error or deviation from desired performance after the fact. Since correction does not take effect immediately, the deviation tends to persist, and the costs incurred continue to rise. An approach, an adaptation of the principle of feedforward control in engineering systems, is now available to correct this serious defi-Future-directed controlciency. managers to see problems coming in time to do something about them. The authors describe the use of feedforward control in cash planning, inventories, and new product development, and offers seven guidelines for its application.

Managers have long been frustrated by making the occasional discovery—too late—that actual accomplishments are missing desired goals. Anyone responsible for an enterprise or any

department of it has suffered the discomfiture of realizing that typical control reports merely inform him what has already happened and that most control analyses are really post-mortems. It does, indeed, do little good to find out late in December that inventory levels were too high at the end of November because of something that happened weeks or months before. Nor is it helpful to learn that a program is behind schedule or incurring excessive costs because of past events.

Most current control systems rely on some form of feedback. Unfortunately, a feedback loop must sense some error or deviation from desired performance before it can initiate a correction. This is, of course, after the fact. Moreover, since correction takes some time to become effective, the deviation tends to persist. The costs incurred, in many cases, increase directly with the duration of the error.

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For example, the costs of holding excessive inventory are proportional to the time the excess inventory is held. The time slippage in a program may continue until correction is applied, and the costs of making up for the time lost usually seem to rise at an increasing rate. It is not surprising, therefore, that most managers consider the problem of control to be one of early recognition of deviations so that correction can be applied promptly. Although many managers have solved this problem to some extent through careful planning, simulative techniques, and network systems of control (PERT/CPM), truly effective control has rarely been achieved.

To achieve more effective control, it is necessary to reduce the magnitude of the error. To avoid the problems inherent in the

response time of a feedback system, deviations should be anticipated. The only way to do this, short of using a crystal ball, is to monitor the critical inputs to a program. If we watch changes in inputs, we can determine whether these would eventually cause failure to achieve desired goals. Time will then be available to take corrective action.

At first glance, it may seem that such a method would be difficult to use in practice. Fortunately, there is now available an approach to effective managerial control through adapting the principles of feedforward control. This form of control is increasingly being used in systems engineering.

#### THE PROCESS OF CONTROL

Although planning and control are closely related, most managers see planning as the establishment of objectives or goals and the selection of rational means of reaching them, and regard control as the measurement of activities accompanied by action to correct deviations from planned events. It may thus be perceived that the function of managerial control is to make sure that plans succeed.

It is obvious that any system of controls requires plans, and the more complete, integrated, and clear they are, the better control can be. This simple truth arises from the fact that there is no way one can know whether he is going where he wants to go—the task of control—unless he first knows where he wants to go—the task of planning.

Control also requires an organization structure that is complete, integrated, and clear. The purpose of control is to detect and correct deviations in events; this must necessarily be done through people responsible for them. It does little good for a manager to be aware of variances but not know where in the organization structure the responsibility for them lies.

Given these prerequisites, any type of

"... there is no way one can know whether he is going where he wants to go—the task of control—unless he first knows where he wants to go—the task of planning."

control and any control technique fundamentally involves the same basic process. First, standards must exist. While an entire plan can be used as the standard of control, the inability to watch everything usually forces a manager to select relatively few critical points that will reasonably measure how planned accomplishments are proceeding. Second, the logic of control requires measurement of performance against standards. Third, the process calls for taking action to correct deviations from plans.

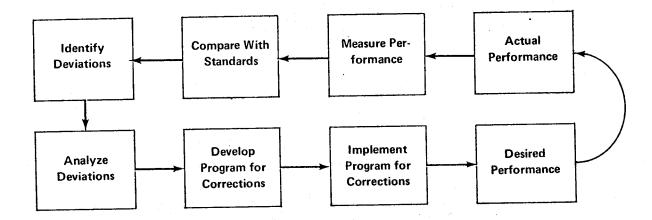
### **Shortcomings and Needs**

Control is really not this simple in practice, however, especially in management. Its basic features should be regarded as a cybernetic system as outlined in Figure 1. These steps represent the kind of feedback system that is involved in the simple room thermostat or the myriad of other control devices that one finds in mechanical and electrical control systems. But it dramatizes what every manager knows so well and many feedback engineers do not consider when they attempt to apply their thinking to management problems.

Simple feedback is not enough. Even the much-heralded ability of electronic data processing specialists to furnish information in real time, that is, as events are happening, is seldom good enough for management control. The fastest possible information may measure actual performance, may often be able to compare this measurement against standards, and may even be able to identify deviations. But analysis of deviations and the development and implementation of programs for correction normally takes weeks or months, if

FIGURE 1

Management Control as a Cybernetic System



the correction can be made at all. Moreover, during this time lag, variances often continue to grow.

An inventory above desired levels may take months to analyze and correct. A cost overrun on a project may not even be correctible. A delay in an aspect of engineering or production, if recoverable at all, may be remedied only by an expensive crash program. Feedback is not much more than a post-mortem, and no one has found a way to change the past.

### **Need for Future-Directed Control**

Intelligent and alert managers have recognized that the only problems they can solve are those they see, and the only way they can exercise control effectively is to see the problems coming in time to do something about them. In 1956, the senior author of this article identified future-directed control as one of the major principles of managerial control: "Since the past cannot be changed, effective control should be aimed at preventing present and future deviations from plans." At this time it was emphasized that control, like planning, must be forward-directed and that it is fallacious to regard

planning as looking ahead and control as looking back.

The simple principle of future-directed control is largely disregarded in practice, mainly because managers have been so dependent on accounting and statistical data instead of forecasts of future events. They have been too preoccupied with decimal accuracy, which can only be attained-if at all-from history. In the absence of any means to look forward, reference to history, on the assumption that what is past is prologue, is ad-· mittedly better than not looking at all. But no manager attempting to do an adequate job of control should be satisfied with using historical records, adequate as they are for tax collection and reporting on stewardship of assets to stockholders.

As a matter of fact, Norbert Wiener, the father of cybernetics, recognized the deficiencies of common feedback. He pointed out that, where there are lags in a system, corrections (the "compensator") must predict, or anticipate, errors. Thus, what he referred to as "anticipatory feedback" is often needed, particularly in human and

<sup>1.</sup> Harold Koontz, "A Preliminary Statement of Principles of Planning and Control," Academy of Management Journal, I (April, 1958), pp. 45-61.

animal systems. However, judging by the slowness in developing future-directed controls or anticipatory feedback in management control systems, there is little evidence that this variation of feedback has had the impact on thinking and practice that might have been expected.

### **Techniques of Future-Directed Control**

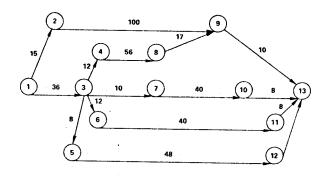
Relatively few techniques of future-directed control have been devised. Perhaps the most widely used is the continual development and revision of various kinds of forecasts, utilizing current expectancies to forecast probable results, comparing these with performance desired, and then developing programs to avoid undesired forecast events. Many managers, for example, after realistically working out their sales forecasts may be disappointed with the anticipated results; they then may review their programs of product development or marketing to see where changes can be made.

Cash forecasts are also a widely employed kind of future-directed control. Because banks do not normally honor checks without funds in an account, companies seldom can risk waiting until late November to find out whether they had adequate bank balances for checks written in October; instead, they engage in future-directed control by assuring that cash balances will be adequate to absorb charges.

One of the best approaches to future-directed control in use today is the formalized technique of network planning, which is exemplified by PERT networks. In PERT/TIME the discrete events required to accomplish a given program result are depicted in network form (since few programs ever are linear in the sense that one portion of it is sequentially followed by another), and the time required to finish each event is contained in the network. As will be recalled, when this is done, the planner can determine

#### FIGURE 2

### Simple PERT Network\*



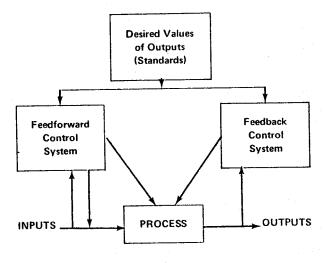
\*Circled numbers are measurable or verifiable events, and numbers on arrows are estimates of days required to complete an event.

which series of events will have the least slack time.

The simple PERT network shown in Figure 2 will illustrate this long-used technique and how the most critical path—the one with the least slack—can be identified. A major advantage of this tool is that, through careful planning and measurement of progress in each event, any time slippage becomes evident long before the program is finished. The time available to finish the remaining events is one of the inputs to those events; if it is less than the minimum desired time, steps can be taken to accelerate any event along the critical path that lends itself to speed-up at minimum cost.

If, for example, there is no slack time on the critical path of events "1-3-4-8-9-13" (in other words, if delivery has been promised in 131 days), the manager knows that if event "3" is ten days late the entire project will be late unless something is done now. Although PERT has tended to become so complex in practice that its use for actual managerial control has declined, it is basically the best single device of future-directed control that has yet been put into practice.

Comparison of Feedback and Feedforward Control Systems\*



\*In a feedback system, corrections of outputs are fed back into the process. In a feedforward system, undesired variations of inputs are fed into the input stream for correction or into the process before outputs occur.

### FEEDFORWARD IN ENGINEERING

As early as 1928, U.S. Patent No. 1,686,792 was issued to H. S. Black on a "Translating System," which incorporated the principle of feedforward control in engineering systems. However, the application of feedforward in electrical and process systems did not come into common use until a few years ago.<sup>2</sup>

In its essence, engineering feedforward control aims at meeting the problem of delay in feedback systems by monitoring inputs and predicting their effects on outcome variables. In doing so, action is taken, either automati-

2. See, for example, L. F. Lind and J. C. C. Nelson, "Feed Forward: Concept in Control System Design," Control & Instrumentation (April, 1970), pp. 39-40; F. G. Shinskey, Process Control Systems (New York: McGraw-Hill Book Company, 1967), Chapter 8; F. G. Shinskey, "Feedforward Control of pH," Instrumentation Technology (June, 1968), pp. 69ff.; J. A. Miller, P. W. Murrill, and C. L. Smith, "How to Apply Feedforward Control," Hydrocarbon Processing (July, 1969), pp. 165-72.

A review of engineering literature discloses a few references to feedforward control early in the 1960's, but the real volume of writing has occurred since 1967.

cally or by manipulation, to bring the system output into consonance with a desired standard before measurement of the output discloses deviation from standard. Thus, while feedback control relies on detecting errors in controlled variables as system outputs, feedforward is based on detecting and measuring system disturbances, and correcting for these before the system output change occurs. The basic concept of a feedforward and feedback system is outlined in Figure 3.

Feedforward has had wide application in the chemical and petroleum processing industries. It has been found particularly valuable where constant temperatures of material flow, exact mixtures, and various forms of chemical reactions require the precision that ordinary feedback, with its normal cycling, cannot achieve.

Perhaps the simplest form of feedforward control is contained in a system to maintain a fixed temperature of hot water leaving a heat exchanger where cool water inputs are heated by steam inputs. A thermostat on the water outlet would hardly be adequate, particularly with intermittent and variable uses of hot water; sudden changes in water output would probably cause bursts of cold water and steam inputs with resultant cycling of the water temperature.

To solve this problem, a systems design would provide a controller that would adjust the opening of the steam valve slightly. As the hot water usage starts to increase, the steam will be on its way into the tank before the water temperature drops below standard. A second feedforward loop might monitor the steam temperature and increase the rate of steam usage if its temperature should fall, in order to maintain the same heat input. By typing mathematical calculations into a computer that translates information to the input control valves, the oscillations characteristic of simple feedback systems can be reduced or entirely avoided.

However, even the most enthusiastic proponents of feedforward control admit

that, if input variables are not known or unmeasurable, the system will not work. Therefore, for the best control, the use of feedback for output variables is also suggested.

### FEEDFORWARD IN HUMAN SYSTEMS

The feedforward applications one finds in everyday life are far simpler than engineering applications. A motorist who wishes to maintain a certain speed does not usually wait until he notes that his speedometer has fallen below this speed as he goes up a hill. Instead, knowing that the incline represents a disturbing variable in the system of which he is a part, the driver is likely to start correcting for the expected decrease in speed by accelerating in advance.

Similarly, the average person does not wait until a rainstorm actually feeds back to him the need for an umbrella before he carries one. Nor would a successful hunter aim his gun directly at a flying bird; he would "lead" it to correct for the delay in his own system, his reactions, the gun, and the shot velocity.

It is, therefore, surprising that more thorough and conscious feedforward techniques have not been developed in management, particularly since the delay factors in ordinary feedback correction are so long. As mentioned previously in this article, this has been done by such means as forecasting end results and PERT/CPM networks. But a little analysis and ingenuity could result in much wider use of effective controls and even the future-directed controls now in existence could be greatly improved.

A number of illustrations of how the principles of feedforward might be used in management may be given. Many require development of mathematical models of the system so as to provide managers information of forthcoming trouble in time for correction, but space does not permit the display of such models here. The approach of feedforward can be shown by several simple schematic

"But a little analysis and ingenuity could result in much wider use of effective controls and even the future-directed controls now in existence could be greatly improved."

models. For this purpose, the cases of control of cash, inventories, and new product development will be presented.

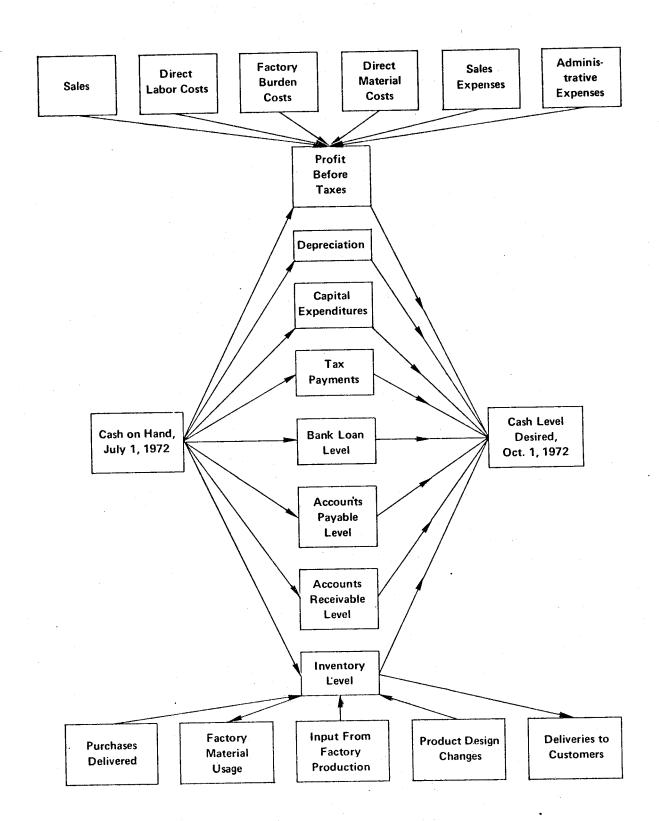
### Feedforward in Cash Planning

Since cash specasting lies at the base of cash planning and control, this widely used technique of control is one of the best for revealing the application of feedforward to management. The basic inputs and construction of a cash control system may be seen in Figure 4. As can be noted, a number of input variables account for a desired future cash level. This model, representing a fairly simplified prototype of reality, shows that if any of the input variables differ from those premised when the cash plan was made, the desired cash level for the future will be affected.

As can be seen, many of these variables can have either a negative or positive effect on cash flow and the desired cash level at a given time in the future. It is readily apparent that normal feedback techniques are not adequate, and constant monitoring of the various input variables, with a feedforward of their influence on cash, is necessary for careful cash control. Of course, one way to avoid the problem of shortages is to have available a ready bank line of credit. But what is likely to happen in this case is that the enterprise will keep unnecessarily high balances of cash, with resultant avoidable interest costs or loss in investment income.

It is also clear from cursory examination of this feedforward system that a mathematical model programmed to a computer can readily trace the influences of changes of input variables on cash flow and availability.

FIGURE 4
Input Variables for a Cash Plan



Neither this nor careful monitoring of input variables should be very difficult to do in practice.

### Feedforward in Inventory Control

One of the most difficult problems in business is the proper control of inventories. Many enterprises incur large and often unexpected cost increases, as well as sizable demands for cash because of inadequate control of inventories. Moreover, as experience continually teaches us, an inventory discovered to be out of control on the high side is extremely difficult to get under control except, of course, through that most costly of all solutions—writing off excess stocks.

Also, the costs of carrying inventory, due to expenses from handling and storage, interest, property taxes, and possible obsolescence, are higher than generally assumed; 25 percent of inventory value per year is often regarded as a reasonable estimate. Nor should it be overlooked that inventory shortages often have high costs because of missed sales or lost customers.

In recent years, operations researchers have presented a vast array of mathematical inventory models and refinements. There can be no question that they have contributed greatly to effective planning and control of inventories, and many can be used as the basis for effective feedforward in inventory control. The difficulty with many models is that they tend to concentrate unduly on such matters as economic order quantities and safety stock levels. These may be appropriate for a mass production operation, but may not take into account the many other input variables, such as obsolescence or property taxes, that make effective inventory control so difficult and important.

Any company will do well to develop its own inventory model, using, of course, the many standard algorithms and techniques available, but taking into account as many as possible of the variables that may influence actual inventory accumulation.

The schematic diagram shown in Figure 5 reveals the complexity of inventory control. Once a desired inventory level is established in a way that minimizes costs in the light of demands for adequate inventory, the total (whether expressed in dollars or days of sales) tends to be used as a standard. Actual results are compared to it through feedback with little or no monitoring of the input variables on which the desired level was determined.

The attempt is normally made to maintain the inventory within desired limits by using only reorder point, economic order quantity, and maximum inventory level. In the simplest manual system, when a withdrawal is noted on a stock record, the balance is compared with the reorder quantity. When the balance on hand falls below this level a purchase order is issued. All of this may take place without considering the predictive changes of the original inputs.

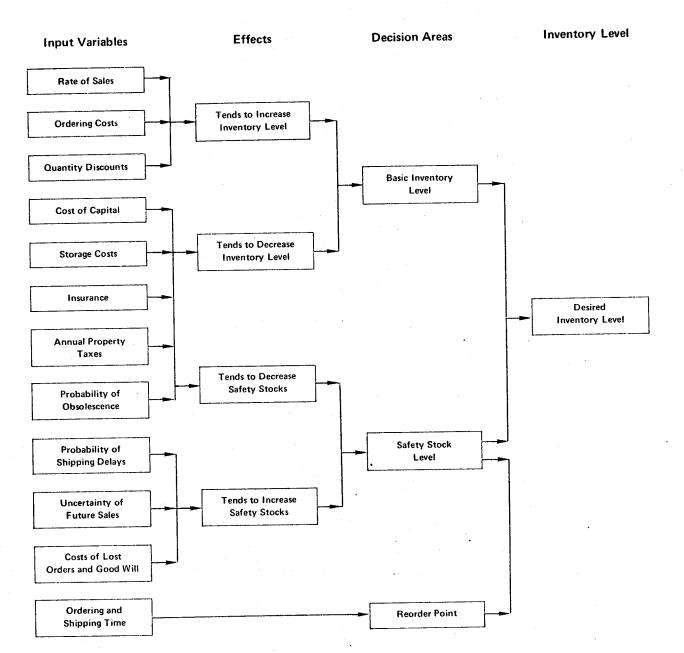
The effect of such action may be to allow inventory to go out of control and raise costs. For example, if the rate of sales increased for a particular item, a company could find itself reordering too frequently or even running out of stock, thus increasing costs unnecessarily. Conversely, if sales decrease, a company could find, that it was wasting cash by holding excess inventory. If sales declined further and a company continued reordering, it could find itself with a large obsolete stock.

If, instead, a company regularly monitored input variables, inventory levels could be adjusted by feedforward control by following the original decision paths and adjusting inventory purchases. In a company that used a manual inventory control system, for example, a simple monitoring system could be devised. It need only consider significant changes in input.

However, it must be admitted that a more sophisticated computer-controlled inventory

FIGURE 5

Effect of Input Variables on Determining Desired Inventory Level

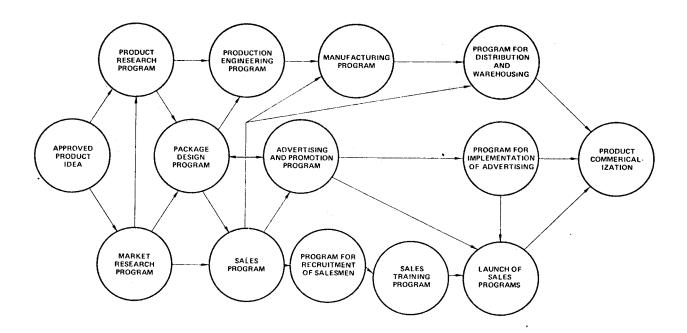


system would be able to adjust more accurately for the effects of smaller changes in input variables and thereby reduce over-all operating costs by keeping inventory under control.

In reviewing the various input variables, it can easily be seen that different departments within the company would have to be responsible for feeding information (probably into a central inventory planning and control unit)

FIGURE 6

Feedforward Through a System of Interlocking Contributory Programs of a New Product Program



on the variables within its field of knowledge. For example, ordering costs, economic order quantity, and quantity discounts are usually best known by the purchasing department; shipping time and unscheduled delays in shipping are data that could be reguarly expected from the traffic department.

Given a recognition of the types of input variables and a system for regularly collecting information on them, it should be easy to anticipate what is likely to happen in inventory. In feeding forward this information, it should be practicable to develop a kind of inventory control that is truly future directed.

### Feedforward in New Product Development

The typical new product development program is, in the first instance, a system of interlocking contributory programs, as shown in Figure 6. It can be readily seen that this is similar to a PERT planning and control network. If times and costs are estimated for

each program event in the network, the accomplishment of each subsidiary program becomes an input variable by which it is possible to feedforward the probable delays and costs of the completion of the program.

Moreover, each of the major programs in this network can be further broken down into a system of input variables so that completion of the total program can be forecast. Action can be taken in time to make necessary corrections and keep it under control. For example, within the product research program, there will normally be a number of subsidiary programs or events. These may include establishment of design definition and specifications; preliminary design of the product; development of a breadboard model; and testing the model.

Each of the other programs can be broken down into a number of subsidiary events or programs. These, in turn, constitute input variables to the individual programs necessary for the completion of a total product development program; their monitoring can feed-

forward both time and cost factors against the standards desired for the total program.

In addition, analysis can disclose a number of other possible, and usually unplanned, input variables that may affect a desired end result. There are likely to be many of these, including such influences as delay in obtaining needed parts; failure of some part in a test; illness or departure of a key engineer; interference of a higher priority program; or change in a customer's desired specification. While not all of these can be carefully estimated in advance, and some may even be unforeseen, feedforward control can recognize the impact of such disturbances and provide for action in time to avoid program failure.

### Change of Goals

In feedforward control systems in engineering, the systems are almost inevitably designed to correct input variables so that a given standard or goal may be achieved. In its application to managerial problems, the same approach can be used, but it should not be overlooked that the system may lead to changes in goals.

By placing emphasis on input variables, both those foreseen as a part of the program and those unforeseen, feedforward applications can furnish a means of regularly reviewing program goals themselves. A material change in interest rates, for example, may make a review of inventory goals desirable. Or a new development in product technology or market tastes may require a reevaluation of a product program. Managers must always keep in mind that goals and programs may become obsolete.

## FEEDFORWARD CONTROL GUIDELINES

Although many other examples of application of feedforward to management control might be given, it is hoped that the transfer of engineering principles to management situations will be clear enough to help open the way toward the systematic application of feedforward in many areas. This can be done more easily than it may first appear. But in doing so several guidelines should be kept in mind.

- 1. Thorough planning and analysis is required. As in all instances of management control, thorough and careful planning is a primary prerequisite. But, especially in applying feedforward, this planning must be as thorough as feasible. Input variables should not only be identified but seen in their relationship and impact on desired end results.
- 2. Careful discrimination must be applied in selecting input variables. Since not all variables that may have some effect on output can be identified and monitored in typical management systems, it is essential that only the more critical variables be selected for watching. This is, of course, one of the key requirements of the managerial are—to identify those elements that make a material difference in the operation of a plan.
- 3. The feedforward system must be kept dynamic. There is always the danger that input variables will be identified in the analysis stage and only these will be monitored. The alert manager will, of course, watch for new influences, either within or outside the control system, which might seriously effect a desired output. New technology, unexpected changes in loan rates and availability, changes in customer tastes, and even unanticipated changes in social or political pressures are examples of input variables that may not have been foreseen.
- 4. A model of the control system should be developed. Clearly, if a feedforward system is to be utilized, the area in which such control is desired must be defined, with the various significant input variables identified and their effects on desired goals analyzed.

This model may be a simple schematic drawing. It is far better, of course, to use an appropriate mathematical model that can be programmed in a computer. This way, the manager can take into account a larger number of input variables, more accurately calculate their impact on program goals, and be able more quickly and accurately to take corrective action.

- 5. Data on input variables must be regularly collected. Feedforward control is, of course, not possible without regular collection of pertinent data concerning the input variables so that the impact of this information can be carefully weighed. It is in this area that fast information availability is highly desirable and real-time information could have much meaning for control.
- 6. Data on input variables must be regularly assessed. No purpose can be served if input data are not regularly and carefully assessed to ascertain their influence on future program results. Barring unforeseen and unprogrammed variables, a computerized system can deliver this assessment quickly. However, for many feedforward systems the experienced eye and judgment of a top analyst may be good enough to point toward future deviations from planned results.

7. Feedforward control requires action. Few, if any, techniques or systems of management control are self-activating. All the system can do is to surface information that indicates future troubles, hopefully in time for something to be done to avoid them. This, of course, requires action. But if the system can be designed with enough lead time for a manager to take action, that is all that can be expected. And astute managers ask for nothing more than to be able to see their problems in time to do something about them.

There can be no doubt that feedforward is largely an attitude
toward the analysis and solution of problems.
It is the recognition that feedback information is just not adequate for management
control and that a shift must be made away
from emphasis on quickly available data on
final results to quickly available data on those
input variables that lead to final results. It is a
means of seeing problems as they develop and
not looking back—always too late—to see why
a planning target was missed.

Organizations are of vital interest to the social scientist, because one finds within them an important juncture between the individual and the collectivity. Out of this juncture comes much in our pattern of living that has been the subject of both eulogy and derogation. That man derives a great deal from organizational membership leaves little to be argued; that he often pays heavily for the benefits of organizational membership seems an argument equally compelling. At the heart of this exchange lies the process of control.

Characterizing an organization in terms of its pattern of control is to describe an essential and universal aspect of organization which every member must face and to which he must adjust. Organization implies control. A social organization is an ordered arrangement of individual human interactions. Control processes help circumscribe idiosyncratic behaviors and keep them conformant to the rational plan of the organization. Organizations require a certain amount of conformity as well as the integration of diverse activities. It is the function of control to bring about conformance to organizational requirements and achievement of the ultimate purposes of the organization. The coordination and order created out of the diverse interests and potentially diffuse behaviors of members is largely a function of control. It is at this point that many of the problems of organizational functioning and of individual adjustment arise.

-Arnold S. Tannenbaum Control in Organizations

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QUESTION: How far down (how many levels) should a manager work with in setting goals?

ANSWER: Manager should review two levels. Manager can impart information so long as he doesn't "undercut the boss" (employee's immediate superior).

Manager may discuss policy areas, basic direction of the company, etc.

with all employees.

PURE INFORMATION SHOULD BE PASSED EVERY WAY IN THE ORGANIZATION - NOT

JUST UP AND DOWN - USE GRAPEVINE.

The higher you are in the organization the more aware you should be of

the effects of your words.

QUESTION: How do you weigh policies and practices against creating environment

without obstacles?

ANSWER: They are plans - choosing alternatives - objectives - strategies - policies - procedures - rules - programs - budgets. Policies and

procedures are plans because they shape future actions.

Policy is a framework for discretion. It is a guide to thinking. The essence of policy is discretion. When there is no discretion, it is then a rule. Procedures or practices are chronological sequences of actions.

Look at company policies and ask how many are policies and how many are

rules. Ask, "Do I mean them to be rules"?

QUESTION: Can anyone interpret board policy except manager?

ANSWER: This depends on delegation. General Manager is; however, still responsible.

Authority is the power to exercise discretion.

QUESTION: Is policy made to be broken?

ANSWER: No Sir! Rules--yes, you can, if you can get by with it. Break a rule

if you don't get into trouble.

Example: A company had a policy which had evolved through the years of paying an employee which had a new baby born into his household \$50, and upon the death of a family member the company paid \$100 to the employee. Wife of one employee had a miscarriage and the employee a tempted to

collect \$150 under company policy.

QUESTION: Are you then saying, make policy broad?

ANSWER: Not necessarily. Give the latitude you want people to have in managing.

Don't give job of writing policy to some clerk. Policy development

needs to be assigned to someone high in the organization.

Society develops two kinds of people - policy minded type who want discretion and procedures minded type who want explicit instructions.

QUESTION: When do you revise policy?

ANSWER:

A thorough review should be made once each year. The internal operational auditor is needed who can go down in the organization and find out from the supervisors "what is screwing up his operation" and bring this to the attention of the top man.

Problem is getting things surfaced so that appropriate action can be taken.

Make sure policy is needed before it is developed.

Let your motto be - THINGS THAT MAKE NO DIFFERENCE MAKE NO DAMN DIFFERENCE.

Example of policy and rule: Policy - Buy from the lowest of three qualified bidders. Rule - Buy from the lowest bidder so long as it is the manager's brother-in-law.

Procedure is the social security of the timid.

Minimize procedures. BE SURE THEY AREN'T OBSOLETE.

QUESTION: When should you develop procedures?

ANSWER:

Only when they are needed.

We need the same kind of high mentality in handling procedures as we have in engineering, product design, etc. Don't regard as a low level job. Give job of developing procedures status. Personnel in this role need courses on development of procedures, rules, policies, etc.

QUESTION: What is number one cause for managerial failure?

ANSWER:

Inept delegation. The practice of the art of delegation is problem. You exact responsibilities. SOME PRINCIPLES OF DELEGATION:

Delegate by results expected. Have you given him enough authority to do it?

<u>Absoluteness of Responsibility</u>. Responsibility is an obligation owed and no superior can escape, through delegation, responsibilities for activities of subordinates.

Parity of authority and responsibility. Authority must correspond to responsibility.

There must be unity of command. The more an individual reports to a single individual the more responsible he feels to that individual. Where there is no unity of command, look for cost increases and confusion. Maintenance of intended delegation requires that decisions within the <u>authority competence</u> of an individual be made by him and not be referred upward in the organization structure. At some level the authority exists to make decisions, if decision is made at a higher level the delegation is nullified. Be willing to see things done different from your ways.

ENTREPRENEURS ARE POOR DELEGATORS. Delegators must have a willingness to have others make mistakes. Fear of loss of control causes poor delegation.

Dr. Koontz gave listing of different types of delegation birds which indicates weaknesses of delegation in practice.

#### AMERICANUS DELEGATAS

(1) White Shirted Hoverer

(2) Pine Striped Hoopster - Hollers "Oops"

(3) Pussy Footed Mouse Trapper

(4) Bald Headed Perforator

(5) Gray Thatched String Holder

- (6) Yellow Bellied Credit Snatcher
- (7) Lessor White Breasted Cuckoo (lays eggs in others nests)

(8) Red Breasted Over-Doer

- (9) Golden Crowned Mourning Dove
- (10) Black and White Organization Creeper
- (11) Red Headed Fire Fighter
- (12) Lion Kicking Vulture
- (13) Duck Billed Double Talker

USE MIRROR - YOU MIGHT FIND SOME OF THESE BIRDS.

QUESTION: How much and how far do you push decision making down in the organization?

ANSWER:

Notion of pushing authority down as far as it will go is ridiculous. It could go right out the window. Too much decentralization can cause department managers to "run right off the field." (General Electric and its price fixing situation is example.)

The General Manager (chief operating officer) decides:

1. Overall company objectives

- 2. Major personnel development policies
- 3. New produce (services) development

4. Cash planning

- 5. Major facilities planning
- 6. Organizational planning

Management has to be tough. It has to be difficult. Else, how could so many mistakes be made?

QUESTION: What is the difference in responsibility and accountability?

ANSWER: They are one and the same.

QUESTION: What about Watergate--who had the responsibility?

ANSWER:

Nixon did right. He took responsibility. When G. E. had price fixing problem, Cordiner claimed no responsibility and placed blame at lower levels for breaking of anti-trust laws. On the other hand, General Motors' president took full responsibility for action taken by G. M. in seeking personal information about Ralph Nader for purposes of deterring him from his work and president apologized to Nader.

Rural Electric Cooperative Managers can't delegate some things because of visability of the REC in the community.

Suggest REC's develop a chart of authorizations and have chart approved by the board. (See pages 364 - 366 in 1972 Edition of Principles of Management.) This is a useful tool with the board in showing them

what they should be involved in and what they should not.

QUESTION: WITH REFERENCE TO MODELING, I fear sophisticated models, and don't use--what else is available to get feedforward information?

ANSWER: Don't worry about the mathematical model. Develop the problem schematically. When this is done, you will surface a variable which will affect your problem which you hadn't thought of.

On any new management technique, try first for non-sophisticated program.

QUESTION: How can General Manager help Boards operate effectively?

ANSWER: Develop chart of authorization and get it approved. Present goals and objectives and get board approval and commitment. In areas where board decision is required, make sure a prepared recommendation and back up is presented to board in advance of the meeting. Set aside a certain portion of company which will be reviewed at each meeting. This gives a double barrelled advantage — informs board and gives exposure to managerial personnel to board.

GET BOARD INVOLVED IN RIGHT THINGS.

You need one guy on the board who will ask the "crummy" question of the boss.

QUESTION: How much of your time should you spend in appraisal session with your subordinates?

ANSWER: What is more important than knowing how good your people are? One of the most expensive things you buy is a poor manager (supervisor). Take whatever time is needed.

QUESTION: What about group screening of job applicants by peers for vacant position?

ANSWER: Good. Screening group will feel a responsibility for success of individual if they help to select him.

QUESTION: What is available on the appraisal of boards of directors?

ANSWER: Not much, I'm afraid.

QUESTION: How do you find the effectiveness of bank boards as opposed to industrial corporation boards?

ANSWER: Haven't had enough experience with evaluation of these groups to express an opinion. I find that the most significant work of any board is done by major committees of the board.

What is needed to assure effective management for the future

Because - Manager's role is changing Knowledge is changing There is danger of managerial obsolescence There is super competition so must have more effective management

What is needed Managers humble enough to learn
Programs and techniques to management
Development must start at the top
More useful knowledge and better transmission - there is
need for compressing knowledge
More Management Research and Development

Task of management consultants and national associations Hold more Management clinics
More theory to bind things together
Book is a structure to bind things together. There is
nothing more lost than a lost fact.

THERE MUST BE MORE MEANINGFUL RESEARCH RELATING TO THE MANAGER'S JOB

# MINUTES OF THE 1973 RURAL ELECTRIC MANAGEMENT DEVELOPMENT COUNCIL MEETING

Attendance The 1973 Rural Electric Management Development Council meeting was held at the Holiday Inn in Fargo, North Dakota, May 8 through 10. Jim Golden, Chairman of the Council, opened the meeting at 9:00 a.m. on May 8 and introduced Willard Grager who presented the Mayor of Fargo to welcome the Council members to Fargo. The Mayor recognized Willard and Cass County Electric Cooperative for their contributions to the growth and development of the area. Attendance report indicated 47 persons in attendance representing 25 consumer rural electric systems; NRECA; and one special guest, retired REC Manager, Norman Cross. Mr. Cross was recognized by Jim Golden.

Program Preview Jim Golden reviewed the program schedule for the three days and stated that the business session would be held on the morning of May 10. He appointed Barbara Deverick to serve as Secretary for the 1973 Council meeting and stated that Charles Thompson, Chairman of the Nominating Committee, would give his report at the business session on Thursday morning. Jim also stated that Charles Weaver of NRECA would be present at the business session on Thursday to discuss an area which the Council may wish to consider as a possible research project. He stated that the business session would adjourn by 10:30 on Thursday.

Business Session Following the presentation of the regularly scheduled program and tour of Cass County Electric Cooperative's office facilities, the Council met for a business session at 8:00 a.m. on Thursday, May 10. Jim Golden, Chairman, presided and presented Charles Weaver of the Management Services Department of NRECA.

NRECA proposals Mr. Weaver presented a proposal for a project to develop Standard Operating Ratios for Rural Electric Cooperatives which would assist the management of REC's in the day-to-day conduct of cooperative business. A copy of the proposal is attached to these minutes. Mr. Weaver indicated that NRECA was very much interested in this project and stated that he hoped the Council would give serious consideration to sponsoring the project. Estimated cost of the project was stated at \$4,650. Mr. Weaver also suggested that the Council might wish to consider holding its Annual Conference just before the Annual Advanced Management Conference which NRECA sponsors each year. He stated the 1973 meeting would be in November and the Council could co-sponsor the Conference and Council members would be given group rate for Conference registration fee. He stated that the Advanced Management Conference was designed to provide stimulation for above-average managers.

Jim Golden thanked Charles Weaver for his presentation and stated that the Council group would consider the proposals presented by Mr. Weaver.

Treasurer's Report It was reported that the Treasurer of the Council, Bevis Hanna, was unable to be present for the business meeting and Everette Bristol was recognized to present the Treasurer's Report. Copy of the Treasurer's Report is attached to these minutes. Upon motion made and seconded, the Council approved the Treasurer's Report and expressed thanks and appreciation to Bevis Hanna for his fine work. It was reported that the Treasurer desired the Council to authorize other signatures for access to Council funds, the Treasurer being the only approved signatory at present. Upon motion duly made and seconded, the Council approved the addition of the Chairman and Vice-Chairman as signatories for access to Council funds.

Clyde Hukills Chairman Golden took note of the absence of Clyde Hukills, Manager of Kay Electric Cooperative. He stated that Clyde had suffered a heart attack; however, was recuperating satisfactorily at his home. The Secretary was asked to send a note to Clyde in behalf of the Council.

Nomina-

The Chairman called for the report of the Nominating Committee. Chairman Charles Thompson gave the report. The report indicated that the following persons were nominated by the committee for the vacancies indicated:

Vice Chairman - Charles Overman Program Committee Member - Mark McNeil Nominating Committee - Millard Goff Membership Committee - Virgil Herriott

There were no other nominations. Upon motion made and seconded, the Council directed the Secretary to cast a unanimous ballot for the election of those nominated.

The Chairman of the Nominating Committee reported that the Nominating Committee recommended to the Council the establishment of a standing committee on Management Research. The function of the committee would be to identify research areas and initiate recommendations. Upon motion duly made and seconded, the Council approved the establishment of a standing committee on Management Research to correspond in terms to the other committees. The Nominating Committee presented the names of the following persons to serve on the Committee and recommended that their terms of office be established by the drawing of lots.

Management Research

Research Committee

Ed Gaither, Chairman James Kiley Willard Grager Cecil Viverette

There were no other nominations for this Committee. Upon motion made and seconded, the Council directed the Secretary to cast a unanimous ballot for the election of those nominated. Lots were drawn by the committee members and resulted in terms of service as follows - Ed Gaither, Term Expires in 1974; James Kiley, Term Expires in 1975; Willard Grager and Cecil Viverette, Terms Expire in 1976.

No Combining of Committees There was discussion concerning the function of the Management Research Committee The Council determined that the primary function, as stated by the Nominating Committee, should apply and that the committee should look at research programs, projects and ideas, and that the committee should have authority to spend money on behalf of the Council for research. The Council discussed the question of whether or not the Research Committee should be combined with the Program Committee and it was the concensus of the group that these two committees should not be combined, but closely coordinate their work.

1972 Project Not Carried Out Jim Golden reported that the Council had failed to carry out the directive of the Council given at the 1972 meeting because commitments could not be obtained for the remainder of the funds needed to carry out the research project.

CFC Support The directors of CFC who were present reminded the Council that CFC is committed to support management research and development by its charter; that charter requirements are that CFC is to invest 1% of its net earnings in It was felt that CFC would look with favor on recommendations for research made by the Rural Electric Management Development Council.

**NRECA** 

Charles Weaver stated that it was hoped that NRECA would get some money from dues to do some R & D, but because of the action of December 29 relating to REA, funds had gone into legislative effort for this year.

Who may commit funds

During the discussion regarding funding of R & D project, it was pointed out that the question of who had authority to commit funds for the Council was somewhat fuzzy.

Charles Overman stated that the R & D program could go two ways (1) Support, by funding an outside project by an expert such as Seaton or (2) Carry on internal research projects supported by all Council members with some seed money from the Council.

Direction for Committee

The Council felt that the first responsibility of the Management Research Committee should be to decide on the objectives for such research and for the committee. Jim Kiley stated that the research work of the Council should be limited to what the group is capable of and confined to areas Council members Research can do and leave R & D projects of national scope and concern to NRECA, CFC, and REA. The Council's role would be to point out the concerns of its membership in these areas and lend its support.

REA

Bill Beverage mentioned the vast amount of work REA had done on the development of standards for use by REC's.

The Chairman stated that a motion was in order providing direction of the Council to the Management Research Committee.

Direction to Comm-

ittee

Bill Beverage moved that the Management Research Committee give its attention to (1) Setting objectives for the committee (2) A Management Development Program for the Council (3) and a study of the Seaton Program, and if the Committee feels that the Council should undertake a project this year, it should consider the Seaton project first. Charles Overman seconded the motion and it was adopted by the Council.

Funding for Committees Everette Bristol brought to the Council's attention that it is possible there would be a surplus of \$12,000 following payment of costs of the 1973 Conference. A motion was then made, seconded, and adopted to the effect that a budget be established in an amount which would permit the Management Research Committee and Program Committee to hold meetings as necessary to carry out their responsibilities for the Council and that \$5,000 be allocated for a research and development project. All bills to be submitted to the committee chairman who will forward them to the Treasurer, Bevis Hanna.

Eval— The Council also recommended that the Management Research Committee make an uate evaluation of the recommendation made by NRECA relative to the combining of NRECA's the Council's meeting each year with the Advanced Management Seminar of Recom— NRECA and that a report be brought to the 1974 Council meeting.

Membership Invitations Olaf Sandvick urged all cooperatives to notify membership committee of REC's eligible for membership in the Council. The Council members were urged to look at the membership criteria and to see that eligible REC's were extended an invitation to participate in the Council.

1974 Meeting Place Bill Beverage extended an invitation to the Council to hold its 1974 meeting at Myrtle Beach, South Carolina. The Council accepted the invitation. The program chairman and officers will establish the time of the 1974 Council meeting and will make every effort to coordinate the meeting dates with NRECA to avoid the congressional rally.

Chairman Golden complimented the Program Chairman, Jim Kiley, for the very fine program. Chairman Golden thanked Willard Grager for the very fine work done in arranging the accomodations for the Council and for the bus tour and hospitality shown by Cass County Electric Cooperative and its personnel. He thanked Barbara Deverick for her work as Secretary and for the publishing of the 1972 Council proceedings.

There being no further business, the Chairman declared the meeting adjourned.

Barbara 7d. Devereds) Secretary

# THE RURAL ELECTRIC MANAGEMENT DEVELOPMENT COUNCIL

### SCHEDULE A

1972 Dues Paid After May 8, 1972:	
05.35.70	\$ 100.00
Grand Valley RPL	100.00
Cornhusker PPD	100.00
Sioux Valley EEA05-19-72	100.00
Sho-Me Power Corp	100.00
White River Valley EC05-26-72	100.00
Slope Elec. Coop., Inc	100.00
Shen and oah Valley EC	
Chugach EA, Inc	100.00
Cumberland EMC	100.00
Four County EMC	
Central .Kansas07-03-72	100.00
Total	\$1,100.00
Total	Ţ <b></b> /
SCHEDULE B	
1973 Dues Paid as of April 20, 1973:	
Slope Elec. Coop., Inc	\$ 100.00
San Isabel Elec. Assn., Inc03-08-73	100.00
Adams Elec. Coop., Inc	100.00
Morgan County REMC03-12-73	100.00
Ozarks Elec. Coop. Corp03-12-73	100.00
Ozarks Elec. Coop. Corp	100.00
Blue Ridge EMC	100.00
Kay Elec. Coop	100.00
White River Valley EC, Inc	
Mecklenburg Elec. Coop	100.00
West Plains Elec. Coop., Inc	100.00
Cass County Elec. Coop., Inc	100.00
Cornhusker Public Power Dist	100.00
Sho-Me Power Corp	100.00
Morgan County REA	
Douglas County EMC03-19-73	100.00
Sioux Valley Empire Elec. Assn., Inc03-19-73	100.00
Cumberland EMC	100.00
Yampa Valley Elec. Assn., Inc03-22-73	100.00
Four County EMC	100.00
Central Kansas EC, Inc	100.00
Shenandoah Valley Elec. Coop04-10-73	100.00
KEM Electric Coop., Inc04-18-73	100.00

\$2,200.00

# THE RURAL ELECTRIC MANAGEMENT DEVELOPMENT COUNCIL

## OPERATING STATEMENT

# PERIOD ENDING APRIL 20, 1973

Income:	
1972 Dues (Schedule A)	\$1,100.00
1973 Dues (Schedule B)	2,200.00
Interest from Investments	553.45
Total	\$3,853.45
Expenses:	
Professional Fees and Expenses:	
Thomas H. Nelson	586.80
NRECA - Robert Kabat and Charles Weaver	831.58
Others:	
Radisson Denver - Coffee Service	87.30
Printing and Postage - 1972 Booklets	74.20
Total	\$ <u>1,579.88</u>
Net Income	\$2,273.57

# THE RURAL ELECTRIC MANAGEMENT DEVELOPMENT COUNCIL

# BALANCE SHEET

## APRIL 20, 1973

### ASSETS

Current:	
Cash in Bank	\$ 3,215.97
Investments (Note 1)	11,000.00
Total	\$14,215.97
LIABILITIES AND MEMBERS' EQUITY	
Members' Equity:	•
Retained Earnings	\$11,942.40
Net Income	2,273.57
Total	\$ <u>14,215.97</u>
Note 1 - Investments:	
Routt County Federal Savings and Loan Association:	
Savings Account C 55(5 1/4% Quarterly)	\$ 5,000.00
Savings Certificate OC 25(5 3/4% Quarterly)	2,000.00
The Farmers State Bank:	•
Time Certificate of Deposit A 2869	4,000.00
Total	\$11,000.00

Proposal Title: Standard Operating Ratio's of Rural Electric Cooperative

Project Director: Lloyd Seaton, Jr. Ph.D., CPA.

Summary: Cooperative utility operating ratios will be developed to assist management in the day-to-day conduct of the cooperative business. Detailed liquidity ratios, solvency ratios and operating revenue-expense relationships should provide guidelines for measuring the relative position and trends of the cooperative, point up trouble spots, and help management serve members more effectively.

### Estimated Project Costs: \$4650

1.	Data collection and planning	\$1,600
2.	Programming	1,200
3.	Tab operator	200
4.	Computer time	750
5.	Clerical	400
6.	Supplies and printing	500 \$4,650

### Research Procedures:

- Select a judgement sample of cooperatives and obtain detailed operating data stratified for size, geographic and demographic factors.
- Develop a general program to analyze the data, and develop three-quartile ratios and other relationships as follows:
  - I. <u>Liquidity Tests</u>:

Current Ratio

Acid-Test Ratio

Receivable to Sales

Average Age of Receivables

Supply Turnovers

### II. Solvency Tests:

Times Interest Earned

Debt Service Coverage

Equity Ratio

Long-term Debt to Total Plant

### III. Operating Relationships and Other Tests:

Earning Power Ratio
Operating Ratio
Overtime Ratio
Salary Ratio (by object of expenditure)
Return on Plant
Margins as a Percentage of Sales
Margins as a Percentage of Net Working Capital

- 3. Test selected relationships for statistical significance.
- 4. Develop a reporting format that is easily understood and used by cooperative management board members and other interested parties.

Justification: A review of materials available to operating managements indicates that there is a need for standard operating performance measures giving cognizance to such characteristics as size, relative wealth, geographic and demographic factors as well as other operating characteristics. The bulk of the current data that are available appears to be directed toward

development of measures of solvency and liquidity. Although such measures are useful in assessing cooperative ability to repay debt, they are not designed to assist management in day to day operating decisions. Availability and use of relevant standard operating performance data should result in more effective planning and budgeting, better utilization of available resources, and most important, better service to cooperative utility members.

# ATTENDANCE RECORD

^								
<u>Cooperative</u>				Y	ears			
	67	<b>'</b> 68	. 69	70	71	72	173	74
Adams Electric Coop						ļ.,,		
Aiken Electric Coop	+	$-\chi$	x-		0	X	- X	
Beadle Electric Coop	<del> ^-</del> -	- <del>^</del> -		X	0	*	*	
Beadle Electric Coop Blue Ridge EMC	<del></del>		X					
Boone County Electric Coop	X	_X_	X_	<u>X</u>	<u>X</u>	X	<u> X</u>	
Carroll Electric Memb. Corp.			X_	X	0	ļ	l A	l <sub></sub>
Carroll Electric Co-op Corp.								ļ <u>.</u>
Cass County Electric Coop	X	X	X		<del></del>	<del> </del>	A	ļ
Central Kansas Electric Coop	$\frac{1}{X}$	^-		0	X	X 0	<u>X</u>	
Chugach Electric		ô	$-\frac{X}{0}$	- X	<u> X</u>	0	X	·
Cornhusker PPD	X	X	$-\frac{0}{X}$	0	O	$-\frac{O}{X}$		
Cotton Electric Coop	1^-1		^-	0		<del></del>	X	
Cumberland EMC	X	X	X	$-\frac{U}{X}$	0	-	0	
Douglas County EMC	1	$-\hat{\chi}$	$\frac{\hat{x}}{\hat{x}}$	$-\hat{\chi}$	<u>X</u>	0	$\frac{0}{X}$	
East Central Electric Association			'à'i		^_		$\frac{1}{\sqrt{\lambda}}$	
East Mississippi EPA		/·	X			}	· · · · · ·	1
Four County EMC	Х	X	0	X	0	()	X	- <del></del>
Grand Valley Rural Power Lines			X			X		
Horry Electric Coop				0 X	0			
lowa Association of Elec. Coop					<u>0</u> X			
Jackson Purchase REC			Χ	Х	0	X	******	
Kay Electric Coop	χ	X	X	Χ	0	Χ	X	
KER Electric Coop	<u>X</u>	Χ	X	X	X	0	X	
Lake Region Electric	_		0	<u> X</u>	-			
Mecklenburg Electric Coop	X	X	X	X	00	0	X	
Midwest Electric Coop	-	X						İ
Morgan County REALET. Morgan. Colo. Morgan County REMC, Indiana		X	<u>X</u>	0	Χ	X	X	
Morth Antonora Machine Com				X	_0	0	Χ	
North Arkansas Electric Coop Northwest Eissouri Electric Coop	1-X-1	_X_	X	_X_	X	Х		
Ozarks Electric Coop	-	:	_X					ļ <u>.</u>
Pickwick Electric Coop	X	_ <u>X</u>	_ X	X	Χ	Χ	Х	<u> </u>
San Isabel Electric Services	<del> , </del>	<u>X</u> - -						
Sedgwick County REC	1 - <del>X</del> -	<u>_X_</u>	_ <del>``</del> X_	_ <u>0</u> _	<u>X</u>	_X	Χ	
Shenandoah Valley Electric Coop	X	<del>-</del> <del>X</del> -	$\frac{X}{X}$	0 X	X		X	<u> </u>
Sho-fie Power Corp.	1 X	$-\frac{\chi}{\chi}$	<u>X</u>		0	0		
Sioux Valley Empire Electric Assn.	1 × 1	-6-	_ <u>X</u> _	<del>- X</del>	_X	X	X	
Slope Electric Coop		- <del>X</del> -	<del>^</del>	X	X	$-\frac{X}{X}$	<del>`</del> X	
South Plains Electric Coop	$\left  \begin{array}{c} X \\ X \end{array} \right $	$\frac{X}{X}$	$-\frac{x}{0}$	0	X			
Tri-County Electric Co-op, Inc.	1							<del></del> -
Verendrye Electric Coop	<del></del>					ļ	Α	
Warren REC	- X ·	<u> </u>						<u> </u>
West Central Electric Coop		_X	$-\frac{0}{0}$	<u> </u>				
West Plains Electric Coop	X		- <del>X</del> -	$-\frac{\chi}{V}$	<u>X</u>		<del></del>	ļ
Wheatbelt PPD	$\frac{1-\hat{\chi}}{\chi}$	$\frac{X}{0}$	- X	$\frac{X}{X}$	<u>X</u>	X	X	<b> </b>
White River Valley Electric Coop	$\frac{1-\hat{\chi}}{\chi}$	_0_	- <del>X</del> -	-0	·	<u>x</u>	X	<u> </u>
Yampa Valley Electric Assn.	$\frac{1-\hat{\chi}}{\chi}$	$\frac{X}{X}$	<u>X</u>	<u>X</u>	<u>X</u>	- <u>^</u>		
I make with a second se	-1		<u> X</u>	X	λ	λ	X	1

Code: X - Paid - Attended

0 - Paid - Did Not Attend

\* - Resigned - No Dues raid for Year
A - Attended - Dues for Year not paid at time of conference

# CRITERIA FOR MEMBERSHIP IN THE RURAL ELECTRIC MANAGEMENT DEVELOPMENT COUNCIL

### I. Active Membership:

Active membership shall be limited to consumer-owned rural electric systems.

### Eligibility:

- A. Member-systems shall be willing to accept and support the Viewpoints and Objectives of the Development Council and be governed by the membership criteria.
- B. Member-systems shall have demonstrated the practice of sound management as set forth in the Nomination For Membership.
- C. Member-systems shall be committed to the concept of continuing, comprehensive management development.
- D. Member-systems shall participate in the Development Council through the General Manager and not more than two other employees responsible for the implementation of broad management programs within the system.

  These participants shall meet the following requirements:
  - 1. Shall have developed a basis of broad understanding and support of the principles of progressive management and have demonstrated their ability to adapt conceptual thinking to successful general management, particularly as it relates to consumer-owned systems.
  - 2. Shall have demonstrated active involvement in delegation of authority, accountability for results, and other management techniques in implementing the broad objectives.
  - 3. Shall evidence a willingness to innovate, experiment, and search for improved methods.
  - 4. Shall be willing to share the results of such activities with other rural electric systems.

# II. Associate Membership:

Associate memberships may be held by other consumer-owned enterprises which shall meet the criteria set forth for active membership, but shall be without vote.

# III. Requirements for Continuing Membership:

A. Active and associate member-systems shall pay an annual membership dues of \$100.00, whether or not they attend the annual meeting, and shall

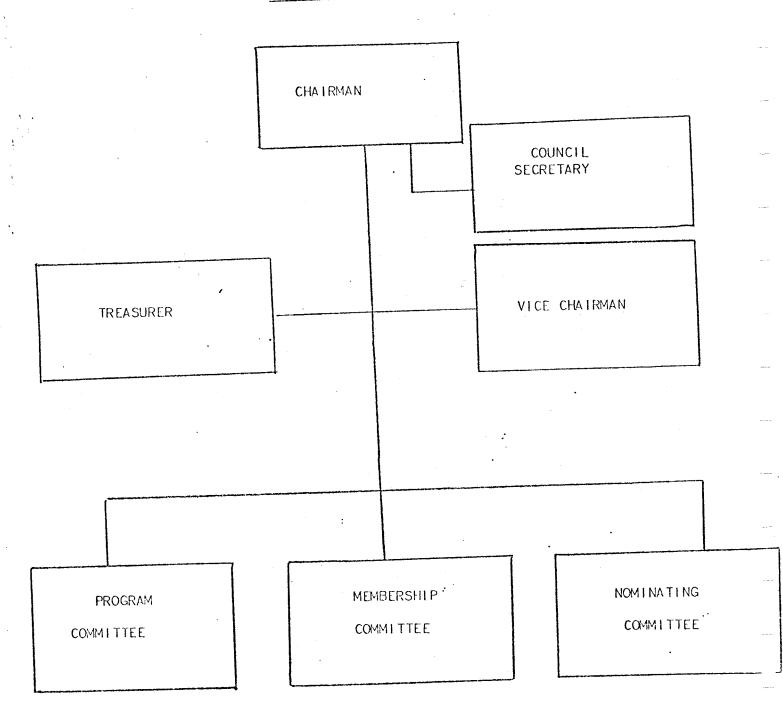
### Criteria for Membership - Continued

bear proportionately the cost of research projects and other expenses in excess of the amounts accumulated through annual dues.

- B. Continuing membership in the organization will depend on the individual participants, as designated by the member-system, as follows:
  - 1. Shall give constructive support to the purposes and programs of the organization.
  - 2. Shall attend all general meetings of the Development Council unless absent with valid cause as expressed in writing.
  - 3. Shall participate as requested in research projects which have been authorized by the organization.
  - 4. Shall appear on a Development Council annual meeting program as requested except with valid cause.

# RURAL ELECTRIC MANAGEMENT DEVELOPMENT COUNCIL

# ORGANIZATION CHART



### 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 years each.
- PROGRAM COMMITTEE: To determine program content and format for the annual conference and secure outside speakers and appropriate participation from the membership. To provide for subject continuity in programming when desirable. To select the time and place for the annual conference and make all conference arrangements. (This can be accomplished through the Management Services Department of NRECA, including registration.) The committee chairman shall preside at all program sessions.
- MEMBERSHIP COMMITTEE: Under the criteria established for admission to membership, select ten (10) organizations each year who are actively engaged in management in the rural electrification field who will be offered membership in the Development Council. Evaluate compliance of member systems with criteria.
- 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.
- EXECUTIVE ASSISTANT: To assist program committee as requested in planning and arranging for Development Council programs. To keep permanent files for Development Council to assure continuity. NRECA Management Services will designate person to serve in this capacity.

#### OFFICERS AND COMMITTEES FOR

### 1974 DEVELOPMENT COUNCIL

Chairman - James Golden Vice Chairman - Charles Overman Treasurer - Bevis Hanna Secretary - Term expires in 1975
Term expires in 1976
Term expires in 1974
Appointed annually by Chairman

### **PROGRAM**

Chairman - James Kiley Term expires in 1975
Jack Cochran Term expires in 1974
Everett Bristol Term expires in 1975
Mark McNeil Term expires in 1976

### NOMINATING

Chairman - Charles W. Thompson
Richard Selinger
Willard Grager
Millard Goff
Term expires in 1975
Term expires in 1975
Term expires in 1975
Term expires in 1976

### MEMBERSHIP

Chairman - Jack Goodman Term expires in 1974
Clifford Robinson Term expires in 1975
Virgil Herriott Term expires in 1976
Tom Townsend Term expires in 1974

### MANAGEMENT RESEARCH

Chairman - Ed Gaither Term expires in 1974

James Kiley Term expires in 1975

Willard Grager Term expires in 1976

Cecil Viverette Term expires in 1976

- A. All committee members and officers elected for a 3-year term.
- B. Chairman of each standing committee named by the Nominating Committee and serve for 3 years when elected.