COMMITMENT TO EXCELLENCE

A Guide to Developing Board Policies for Financial Best Practices

CFC

Commitment to Excellence

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National Rural Utilities
Cooperative Finance Corporation

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Disclaimer: The information in this guide is intended as a helpful and educational resource—not an exhaustive and complete examination of issues to consider when establishing board policies for financial best practices. The guide contains ideas that give cooperatives a starting point for board and management discussions regarding board policies. CFC makes no representations, either expressed or implied, about the information contained in this guide, including warranties of accuracy, completeness, or usefulness. CFC assumes no liability to a cooperative or any third party for damages that may result from use of information in this guide.

Confidentiality: This guide is intended solely for use by CFC members and should be treated as confidential and only shared with others, such as cooperative advisers and consultants, on a "need-to-know" basis.

Foreword

In May 2004, CFC published "Commitment to Excellence: A Guide to Developing Board Policies for Financial Best Practices." Since then the report has been one of the most frequently requested by CFC member cooperatives. Throughout its pages cooperative boards and management have discovered how to better define and understand their respective roles regarding good governance and ensure that documented, world-class financial procedures are followed.

Recognizing that maintaining financial excellence, accountability and integrity are essential to instilling consumer confidence and empowering electric cooperatives—and given the sweeping changes that have taken place in the electric utility industry over the past 13 years—CFC is pleased to offer a revamped "Commitment to Excellence."

While no cookie-cutter solution to policymaking exists, "Commitment to Excellence" offers electric cooperative leaders the opportunity to revisit financial policies and practices to make sure that these tools remain relevant. These analyses have become even more critical with the growth of distributed energy resources—such as solar power and energy storage, along with rapidly evolving consumer energy management and distribution automation technology. Coupled with emerging cyber and physical security concerns these issues challenge cooperatives in providing safe, reliable, affordable and efficient electric service.

I am confident that this revised guide will help boards and management underpin the strong local reputation of electric cooperatives and further bolster the solid position of our rural electric network with the capital markets. The sample board policies and implementation checklists included here offer a detailed roadmap for planning at all levels.

As you review "Commitment to Excellence," please feel free to contact your CFC regional vice president or associate vice president to discuss the information in more detail. In doing so, CFC can help your system further cement bonds of trust and goodwill with your consumer-members.

Sheldon C. Petersen

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CEO
National Rural Utilities Cooperative Finance Corporation

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Introduction

Cooperative business model success flows from its ethos—Greek for “custom” or “character.” The modern expression of ethos can be found in the link between leadership, stewardship and governance when representing an organization’s core values through demonstrated behaviors and decision-making.[1]

Every electric cooperative functions best when a clear understanding exists of the distinct leadership roles and responsibilities of board members, management and cooperative staff. Boards are accountable to members of the cooperative for how well they provide wise leadership and demonstrate financial oversight and stewardship. Management works closely with the board to provide needed information and facilitate access to experts, analyses, and relevant books and records. Management’s leadership role and responsibilities include successful execution (by staff) of strategic, financial and other plans adopted and developed in accordance with board governing policies.

This guide is divided into three sections:

- **Section A: Principled Leadership.** Examines the respective roles of board and management in carrying out a cooperative’s mission and strategic direction, evaluating performance and implementing policies.
- **Section B: Financial Stewardship.** Addresses both the respective accountability roles of the board and management in ensuring use of financial best practices, procedures and techniques in debt financing and managing financial risks, even following a disaster.[2]
- **Section C: Governing for Risks and Change.** Focuses on the board’s governing and regulator role in financial planning, auditing, debt financing, risk management and setting policies and rates and terms of service, including those for evolving technology and distributed generation applications.

1. LeaderMetrics, Published by 3ethos, Mystic, CT

2. LeaderMetrics, Published by 3ethos, Mystic, CT

OVERVIEW

CHAPTER 1: COOPERATIVE BUSINESS MODEL

Electric cooperatives are unique business enterprises because they follow a set of distinctive principles. These principles serve as guidelines for helping the cooperative meet the needs of the membership—not the needs of directors and management. From these principles electric cooperative boards and management develop policies, practices and procedures that allow the organization to operate in the best interests of the membership.

CHAPTER 2: LEADERSHIP ROLE AND DUTIES OF THE BOARD

Members of a cooperative board of directors are appointed or elected according to state law and cooperative bylaws. The board serves as a governing body authorized to direct the affairs of the cooperative and guarantee its long-term health. Powers of the board and its respective officers are specified in the cooperative's bylaws.

CHAPTER 3: STRATEGIC PLANNING: SETTING DIRECTION AND EXPECTATIONS FOR COOPERATIVE SUCCESS

Boards have the ultimate responsibility for ensuring and evaluating the long-term health and direction of the cooperative. They address this responsibility by working together with senior management to identify key long-term goals and priorities through strategic planning. Upon adoption of a strategic plan, the board then authorizes financial resources to execute the plan.

CHAPTER 4: PRINCIPLE-CENTERED LEADERSHIP AND SERVICE: CODE OF ETHICS

Stakeholders, lawmakers, regulators and the public expect cooperative boards and management to promote ethical business practices. A board-adopted code of ethics serves as a commitment to the cooperative's core values and holds directors, employees and vendors accountable for their behavior.

"Leadership is your sense of purpose—your response to a higher calling. Your success as a leader will depend upon your ability to inspire and capacity to serve others. If leadership is missing, your followers will feel anxious."

—LeaderMetrics 3ethos, Mystic, CT

Cooperative Business Model

Electric cooperative operations are governed by a set of guidelines originally drawn up by Charles Howarth, one of 28 weavers and other artisans who founded the Rochdale Society of Equitable Pioneers in Rochdale, England, on December 21, 1844. These principles were introduced into the United States in 1874 by the National Grange, and formally written down by the International Cooperative Alliance in 1937 (last updated in 1995). The seven cooperative principles are:

1. Voluntary and Open Membership
2. Democratic Control (one member, one vote)
3. Member Economic Participation
4. Autonomy and Independence
5. Education, Training and Information
6. Cooperation Among Cooperatives
7. Concern for Community

Electric cooperatives also follow a set of six ideals—values—that underpin the seven cooperative principles: Self-Help, Self-Responsibility, Democracy, Equality, Equity and Solidarity. While many electric cooperatives have adopted various values, the International Cooperative Alliance separately lists cooperative "ethical values" of Honesty, Openness, Social Responsibility and Caring for Others.

FEDERAL TAX LAW RECOGNIZES ELECTRIC COOPERATIVE PRINCIPLES

Under federal tax law a cooperative is an organization established by individuals to provide themselves with goods and services or to produce and dispose of the products of their labor. The means of production and distribution are those owned in common and the earnings revert to the members, not on the basis of their investment in the enterprise but in proportion to their patronage or personal participation in it.

Electric cooperatives organized under Section 501(c)12 of the Internal Revenue Service (IRS) code are defined as "cooperatives" ***if they provide members democratic control***; are ***operated at-cost and margins are allocated to consumer-members*** based on their patronage; and there is ***"subordination of capital" by the membership via membership fees and non-refunded capital credits*** (which can be used by the cooperative to enhance operational capital needs). The subordination of capital lets members take ownership of the financial benefits of the cooperative.

The IRS also requires that "an organization must satisfy three requirements to qualify under Internal Revenue Code (IRC) 501(c)(12). First, it must be organized and operated as a cooperative. Second, it must conduct activities described in IRC 501(c)(12) and the regulations. Third, it must derive 85 percent or more of its income from members. These three requirements can be categorized as: (1) the cooperative organizational and operational test; (2) the activities test; and (3) the income source test."

In short, the criteria by which proposed principles, policies and practices should be evaluated are (1) compatibility with the cooperative definition and (2) performance compared with the standard of doing what is best for the patron, especially the member-patron.

ELECTRIC COOPERATIVE UTILITY MODEL

The National Council of Farmer Cooperatives and the U.S. Department of Agriculture define a cooperative as "a business owned and democratically controlled by the people who use its service and whose benefits are derived and distributed equitably on the basis of use." Perhaps more importantly, however, the Tax Court of the United States through acquiescence of the IRS defines a cooperative as "an organization established by members to provide themselves with goods and services or to produce and dispose of products of their labor. The means of production and distribution are those owned in common and the earnings revert to the members, not on the basis of their patronage or personal participation in it." [1]

Technically, an entity can be a "cooperative" either through state corporate law or under federal tax law. If the entity is incorporated under a general cooperative association act or a special cooperative association act, then the entity is a cooperative under state law. Virtually all electric cooperatives in the United States, including those that are not cooperatives under state corporate law, are cooperatives under federal law.

CAPITAL CREDITS LEGAL ISSUES

From 2009 to 2017 more than four dozen class-action lawsuits regarding capital credits and related board governance issues were brought by members against 70 electric cooperatives in 11 states. In many of these cases, the member-plaintiffs allege that the cooperative violated state statutes regarding "distributing" or "returning" excess capital. Other capital credits-connected causes of action include breach of contract (bylaws), a breach of the board's fiduciary duty and/or abuse of discretion in determining when and to whom to return patronage capital, and unjust enrichment.

As of 2017, 19 states have adopted statutes that address the payment and manner for returning "excess revenue" to members. Therefore, electric cooperatives should carefully check state requirements for annually returning excess revenue and the acceptable manner for doing so. Boards of directors should be able to demonstrate that the board regularly:

1. Reviews the cooperative's capital credits retirement cycle to ascertain its fairness;
2. Discusses with management and lenders what is a reasonable and fair equity level;
3. Examines the potential benefit of special (discounted) capital retirements to the cooperative and former members;
4. Determines whether there is sufficient consent within the bylaws to allow the payment of capital credits to member estates; and
5. Documents board discussions and decisions regarding the manner and timeline for returning capital credits to members.

The CFC/NRECA "Capital Credits Task Force Report," published in 2005, provides a Legal Supplement for a more through overview of capital credits and associated legal, financial, tax and member issues.[2]

1. Puget Sound Plywood, Inc. v. Commissioner, 44 T.C. 305, 306 (1965), acq. 1966-2 C.B. 6 (1966).

2. CFC/NRECA Capital Credits Task Force Report, 2005.

Leadership Role and Duties of the Board

A fiduciary is a person who acts for the benefit of another person on all matters within the scope of their relationship (serving as a trustee of consumer-member interests); who owes to another the duties of good faith, trust, confidence and candor; and who must exercise a high standard of care in managing another's money or property.

Members of an electric cooperative board of directors are fiduciaries. Their fundamental fiduciary responsibility is to prudently represent interests of the members as a group in directing the business and affairs of the cooperative within the law.

In the role of fiduciary, the board serves as trustees entrusted with setting strategic direction of the cooperative's assets and resources. To fulfill this role, boards approve the cooperative's plans and budgets and retain outside experts such as an attorney and auditor.

DIRECTOR DUTIES AS TRUSTEES

As trustees, board members must perform three required legal duties:

- ***Duty of Loyalty:*** Directors place the interest of the cooperative and its members over other interests—especially their own—when making corporate decisions.
- ***Duty of Obedience:*** Directors must be obedient to the law, regulatory requirements, bylaws and board policies when acting in their governance role.
- ***Duty of Care:*** Directors must ask prudent questions and seek relevant information whenever they are asked to make decisions.

DIRECTOR CONDUCT

Directors are charged with discharging their duties, including duties as a board committee member:

1. In good faith;
2. In a manner the director reasonably believes to be in the cooperative's best interest;
3. With the care that an individual in a like position would find reasonable and appropriate under similar circumstances;
4. In a manner that fully discloses to other board members all material facts regarding their decision-making and oversight functions; and
5. Without personal financial benefit by virtue of the position, including always disclosing as soon as possible any actual or potential conflict of interest.

"The major management difference between the for-profit and nonprofit sectors is the larger number of relationships that have to be managed in nonprofits."

—Peter F. Drucker, Claremont Graduate University, School of Management, Claremont, California

DIRECTOR RELIANCE ON OTHERS

To effectively lead an electric cooperative in an ever-changing technological, legal and regulatory environment, boards must increasingly rely upon information from others, primarily key management staff. Therefore, in discharging his or her duty, a director or board officer who reasonably believes that reliance is warranted, may rely upon information, opinions, reports and statements prepared or presented by:

- The cooperative's officers or employees;
- Legal counsel, public accountants or other persons regarding matters the director or officer reasonably believes to be within the person's professional or expert competence; and
- An authorized board committee charged with undertaking the study of an issue or proposal and formulating a report of its findings and recommendations to the full board of directors for consideration.

RESPONSIBILITY AND ACCOUNTABILITY

A board of directors, providing the cooperative's bylaws and/or state law allow, can reasonably delegate some responsibility and authority to others directly or indirectly through a CEO/general manager for undertaking tasks or providing reports on behalf of the cooperative. However, the board must at all times keep in mind that it owes a fiduciary duty to the members.

Traditionally, directors are not liable for business decisions—even if they yield a bad result—if they are made:

- In good faith,
- With no self interest in the decision,
- With the rational belief the decision was in the best interests of the corporation and
- On an informed basis.

This rule applies "to some extent" to board officers.

COOPERATIVE BOARD POLICY TEMPLATE

EXHIBIT 2A

SUBJECT: BOARD DUTIES, RESPONSIBILITIES AND CONDUCT

I. PURPOSE

To describe the duties and responsibilities of the Board of Directors, as well as the standard of conduct and professional development expected of individual board members.

II. POLICY

The Board of Directors shall direct the affairs of the cooperative. All of the powers of this cooperative are held solely by the Board of Directors, except such powers that have been conferred upon or reserved for the members by statute or by the cooperative's Articles of Incorporation or bylaws. Ultimate responsibility for cooperative performance resides in the board.

Below is a listing of those duties and responsibilities. In addition, this policy will establish standards whereby these powers may be exercised in the best interests of the cooperative. Further, it is the policy of the cooperative to expect its directors to gain and maintain the knowledge and skills necessary to function actively and effectively as members of the Board of Directors.

III. EXPECTATION

A. Fiduciary Duty: The Board of Directors has a fiduciary duty to the cooperative and its stakeholders/members. This duty is described as follows:

A director of XYZ Electric Cooperative shall discharge his or her duties as a director, including his or her duties as a member of a board committee:

1. In good faith;
2. With the care an ordinarily prudent person in a like position would exercise under similar circumstances; and
3. In a manner the director reasonably believes to be in the best interests of the cooperative.

B. Key Responsibilities and Functions of the Board:

1. Set the cooperative's mission and purpose(s), and engage, on a regular basis, in strategic planning;
2. Select, regularly evaluate the performance of, and fix the compensation of the CEO/general manager;
3. Review, monitor and report to the membership regarding the critical operating and financial performance of the cooperative;
4. Ensure effective planning and adequacy of resources;
5. Contract for and approve (as a board Committee-of-the-Whole or board Audit Committee) an annual independent financial audit; and
6. Provide program oversight and support, including the adoption of policies and monitoring such for compliance with legal and regulatory requirements, as well as the adequacy of internal controls.

C. Access to Cooperative Management and Information and the Duty of Confidentiality

Directors are entitled to reasonable access to the cooperative's data or other information. A director shall keep confidential all matters involving the cooperative that have not been disclosed to the general public.

1. Requests for access to information or staff should normally be made to and through the CEO/general manager. In some instances, however, it may be appropriate for directors to seek information directly from other employees or outside consultants or experts. For example, members of the board's Audit Committee should have a meeting with the auditor without the CEO/general manager present, in conformance with current auditing practices. The cooperative may wish to consider whether to direct board members to consult with the board chair/president or corporate attorney if they are uncertain whether it is appropriate to direct a specific request to someone other than the CEO/general manager.
2. When a director has sought access to information not generally available to the public or reported to the board, the CEO/general manager shall report on this at the next meeting of the board to ensure that all board members have equal access to the information.
3. Information received by a director shall not be disclosed to any other persons except other directors unless the director reasonably believes that he or she must do so to fulfill his/her fiduciary duty. (A director is encouraged to consult with his or her personal attorney in determining whether fiduciary duty obligates making such a disclosure.)

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COOPERATIVE BOARD POLICY TEMPLATE

EXHIBIT 2A

IV. LIMITATIONS

A. Conduct with Respect to Fellow Directors

Regardless of any personal differences, directors should at all times:

1. Demonstrate mutual respect.
2. Allow opportunity for every other director to be heard on any matter being considered by the board.
3. Refrain from revealing to persons other than directors, the CEO/general manager or the cooperative's attorney any differences of opinion among directors on matters considered and acted upon by the board. (This standard does not preclude fair and accurate publication of such differences to the cooperative's stakeholders/members in relation to contests for director elections or other matters to be voted upon by the stakeholders/members. Nor does it impinge upon a director's right to dissent and to have his or her dissenting vote recorded in the minutes.)
4. Recognize that the board chair/president has the responsibility and authority to enforce standards of behavior.
5. Publicly support decisions of the board except in extraordinary circumstances where the director can demonstrate that a decision and/or action will bring harm to the cooperative or threaten the cooperative's survival.

B. The Right to Rely on Others

In the discharge of his/her duties, a director is entitled to rely on management and board committees of which the director is not a member, to perform his/her respective responsibilities. A director is entitled to rely upon reports, opinions, information and statements presented by the cooperative's management, employees, and outside advisers whom the director reasonably believes to be competent and reliable in the matters being presented.

C. Board Self-Evaluation

The Board of Directors shall regularly engage in a self-evaluation of its performance and accomplishments in relation to the goals and mission of XYZ Electric Cooperative.

D. Board Orientation

Upon election to the Board of Directors, a new director will receive a thorough orientation on the responsibilities of his/her position, conducted by the board chair/president, the CEO/general manager and management staff.

E. Board Training and Development

1. Training and educational programs in the areas of governance responsibilities, utility operations and management oversight are desirable and necessary for a director. Each director is encouraged to demonstrate a commitment to and successful completion of board continuing education programs. To fulfill this commitment, each director is encouraged to attend at least one board training program each year.
2. In addition to formal board training programs, directors are encouraged to attend conferences and other activities designed to improve their skills and knowledge. Expenses for enrollment and attendance at board training programs are approved by the board and paid by the cooperative in accordance with board policy.
3. Board training programs shall be conducted within the confines of an annual budget established by the Board of Directors.

V. IMPLEMENTATION AND COMPLIANCE

A. Implementation

1. All directors serving on, and candidates, nominees or appointees to the board, shall receive a copy of this policy and attest by their signatures to having received a copy of the policy.
2. The cooperative's legal counsel shall inform all candidates, nominees or appointees to the board regarding the terms and conditions of this policy and the personal liability implications resulting from policy violations.

B. Compliance

1. **XYZ Electric Cooperative** legal counsel shall review this policy with the board on an annual basis and discuss any personal liability implications resulting from violations.
2. The board chair/president shall ensure that this policy is implemented and complied with.

This initial policy was established by the Board of Directors at its meeting (date).

APPROVED: ______________________________

Strategic Planning: Setting Direction and Expectations for Cooperative Success

Traditional elements of an electric cooperative's strategic planning puzzle—rate design, departmental budgeting and related program development—are giving way to increasing uncertainties that cooperative boards and management must address, such as:

- Given changes in population demographics and the changing industry, will cooperative members become more or less supportive?
- What new roles, if any, should electric cooperatives assume to serve current and future members?
- Will slow kilowatt-hour sales growth change the core business?
- How many consumers will demand energy from renewable resources or want to install some type of distributed generation/distributed energy resources and how can electric cooperatives play a role in this?
- How will federal and state regulations affect the cost, delivery, and use of electricity and other types of energy now and in the future—if at all?
- As cyber and physical security threats evolve, how will they affect cooperative-served communities and service reliability?
- How do we deal with an aging workforce and ensure that our employees continue to have the skills and motivation necessary to succeed in a changing utility environment?

Questions like these mean electric cooperative boards and management must think critically about how the cooperative can fulfill its present mission, address future aspirations and tackle long-term goals. This usually requires developing, updating and executing a strategic plan incorporating all of the key components outlined below with the help of specialized consultants such as CFC's complimentary Strategic Services Group.

Exhibit 3A, "Strategic Planning," describes the actions of strategic planning that could benefit electric cooperatives. Summarized implementation steps are presented for each proposed practice.

Strategic Planning Key Components

ORGANIZATIONAL STATEMENTS

An electric cooperative can begin the strategic planning process by developing organization statements including a Mission Statement that articulates its purpose, a Vision Statement outlining where a board and management want to be in three to five years, as well as core values each employee should strive to uphold.

Mission Statement
Mission statements provide the framework and context to help guide the cooperative's strategies and actions from year to year while helping employees better perform their jobs. It also articulates the cooperative's mission to members, suppliers and the community. The best mission statements are concise and appeal to values.

Vision Statement
The vision statement provides guidance and inspiration on how an electric cooperative can achieve an optimal desired future. To set the vision, an assessment of the following can help:

- Emerging member needs.
- Potential national economic, demographic, regulatory and other business and sociological changes.
- Market developments relating to new competition (perhaps new technologies rather than conventional energy sellers).
- Service-area growth or stagnation.
- Evolving attitudes about the cooperative's role in the community.

Core Values
Organizational core values support the cooperative's mission and vision statement. These values clarify work behaviors everyone is expected to uphold along with providing a framework for decision-making and how people should behave as they interact with others.

STRENGTHS, WEAKNESSES, OPPORTUNITIES AND THREATS (SWOT) ANALYSIS

Routine, candid analysis of the cooperative's strengths, weaknesses, opportunities and threats (SWOTs) and/or a risk assessment can be very helpful during strategic planning. All cooperatives have issues in each of these areas that, if understood, can be beneficial in setting a strategic direction for the cooperative.

CRITICAL ISSUES

Critical strategic issues that should be addressed over the next two- to three-year period should be analyzed and outlined during a strategic planning process and incorporated into the strategic plan.

STRATEGIC GOALS

Concrete, measurable goals can be established once the cooperative defines its current mission, future vision, core values, SWOTs and critical issues. These goals should be initiatives that the board wants management to address. They should be challenging but achievable over a period of two to three years. They also should address performance areas that may conflict in the near-term but ultimately support each other in the future.

Suggested performance goals might fall into these main areas: Financial; Member Relations; Operations/Reliability; Technology; Human Resources; Power Supply; and Corporate Issues. These areas are based on a "balanced scorecard" approach, which will be discussed in several chapters in this guide.

ACTION PLANS

Typically, every part of an electric cooperative helps achieve strategic goals through a set of clear initiatives and outlined milestones over the two- to three-year planning horizon. The cooperative board should hold management accountable for establishing interdepartmental and departmental action plans as well as attaining interim and ultimate results that support the cooperative's vision and strategic plan.

TRACKING AND REPORTING ON THE PLAN

The strategic plan should be reported on at set intervals, such as quarterly/monthly or semi-annually, so the board can track progress. This will allow a conversation to occur between the management team and directors so that any required changes can be made on a timely basis.

COMMUNICATING THE PLAN

Communication and buy-in at all levels of the cooperative remains key to any successful strategic plan. For this reason all internal and external stakeholders play vital roles in making the strategic plan and cooperative a success. Regular communications will keep all stakeholders and directors knowledgeable about the plan and engaged in its success.

BOARD POLICY

Exhibit 3B, "Cooperative Board Policy Template: Strategic Planning," offers a board policy for directing implementation of best practices for strategic planning. It includes an explicit commitment to strategic planning to guide the conduct of the cooperative's business and community service. It also acknowledges the importance of specifying the mission, vision, values, SWOTs, goals and action plans.

ADDITIONAL RESOURCES

- *National Consulting Group, NRECA.*
- *Kaplan, R.S. & Norton, D.P., "The Balanced Scorecard: Translating Strategy into Action," Harvard Business School Press*
- *CFC's complimentary Strategic Services Group can help in any aspect of the strategic planning process.*

STRATEGIC PLANNING

EXHIBIT 3A

ACTION	IMPLEMENTATION SUMMARY	RELATED RECOMMENDATIONS
1 A cooperative's mission statement should be highly personalized and unique to outline why the electric cooperative exists. It should incorporate the following key elements: • What is the present state or purpose of the cooperative? • What the electric cooperative does. • Who the electric cooperative does it for. • How the electric cooperative does what it does.	A. Conduct a brainstorming session with key staff and management to develop two to three mission statement options to present to the board. Utilizing a neutral facilitator through CFC's Strategic Services Group to achieve this can be helpful. B. Present the options to the board for consideration and guidance. C. Redraft as needed D. Obtain final board approval. E. Develop and implement a plan for the use and communication of the mission statement	Cooperative Business Planning Utilization of CFC Strategic Services Group
2 The cooperative's two- or three-year strategic vision statement builds on its present mission and reflects careful consideration of the following: • What is the optimal desired future state of the cooperative? • What changes affect the cooperative's markets and how do those factors influence the future direction of the cooperative? • What new consumer needs should the cooperative move to satisfy? • What new or different member groups, geographic areas, or services and products should the cooperative consider? • What should the cooperative's business make-up look like in two or three years? • Does it provide guidance to the employees on how their work contributes to accomplishing long-term goals?	A. Conduct a brainstorming session with key staff and management to develop two to three vision statement options to present to the board. Utilizing a neutral facilitator through CFC's Strategic Services Group to achieve this can be helpful. B. Present the options to the board for consideration and guidance. C. Redraft as needed D. Obtain final board approval. E. Develop and implement a plan for the use and communication of the mission statement	Cooperative Business Planning Utilization of CFC Strategic Services Group

STRATEGIC PLANNING

(CONTINUED)

EXHIBIT 3A

ACTION	IMPLEMENTATION SUMMARY	RELATED RECOMMENDATIONS
3 The cooperative's core values support its mission and vision statements with reflection on the following: • What are the behaviors that all employees should uphold at work? • Do the values provide a framework for decision making and how people should interact? • Does it help raise awareness about behaviors and influence perceptions? • Do the values help manage employees' performance expectations?	A. Conduct a brainstorming session with key staff and management to develop five to six core values to present to the board. Utilizing a neutral facilitator through CFC's Strategic Services Group to achieve this can be helpful. B. Present the options to the board for consideration and guidance. C. Redraft as needed D. Obtain final board approval. E. Develop and implement a plan for the use and communication of the mission statement	Cooperative Business Planning Utilization of CFC Strategic Services Group
4 The cooperative's strategic plan is based on realistic assessments relative to its strategic vision. The following SWOTs should be examined: • **Strengths—**These should include genuine, usable internal capabilities and technical expertise or strong business partners that can be utilized to the cooperative's advantage. (Examples include service reliability, strong management or updated technology.) • **Weaknesses—**These should include negative aspects under the cooperative's control that need to be addressed if long-term goals are to be met. (Examples include outdated technology, small member base or inability to attract skilled personnel.) • **Opportunities—**These should include positive conditions not in the cooperative's control, but that might have advantages. (Examples include economic development, mergers and acquisitions, or offering other services.) • **Threats—**These should include negative conditions not under the cooperative's control but that should be addressed to ensure long-term success. (Examples include unfavorable regulation, physical and cyber attacks.)	A. Conduct an anonymous survey with the board and employees as part of a strategic planning process to identify SWOTs potentially associated with each of the cooperative's mission elements and vision. Utilizing CFC's Strategic Services Group to achieve this can be helpful. B. Draft a listing of the cooperative's SWOTs and consolidate into the most important categories during a strategic planning session that is neutrally facilitated. Utilizing a neutral facilitator through CFC's Strategic Services Group to achieve this can be helpful.	Directors' Responsibilities and Competencies Utilization of CFC Strategic Services Group

(CONTINUED)

STRATEGIC PLANNING

EXHIBIT 3A

ACTION	IMPLEMENTATION SUMMARY	RELATED RECOMMENDATIONS
5 The cooperative's strategic plan is based on realistic assessments relative to its strategic vision. The cooperative's top three to five critical strategic issues, which typically fall into the following categories, should be examined: • Financial • Member Relations • Operations/Reliability • Technology • Human Resources • Power Supply • Corporate Issues	A. Conduct an anonymous survey of the board and employees to identify critical issues that board and management should make a priority over the next three to five years. Utilizing CFC's Strategic Services Group to achieve this can be helpful. B. Draft a listing of the cooperative's top issues and consolidate with top SWOT results in a strategic planning session to develop goals for the organization. Utilizing a neutral facilitator through CFC's Strategic Services Group to achieve this can be helpful.	Directors' Responsibilities and Competencies Utilization of CFC Strategic Services Group
6 Two- to three-year strategic goals are established that address typically seven areas: • **Financial—**A financial policy and long-range financial plan that includes a board policy covering financial metrics, equity management, correct rate structures and financial forecasting. • **Member Relations—**External communication and education plans that address the evolving industry and generational changes. • **Operations/Reliability—**Reliability plans to replace miles of original plant and deploy smart grid as well as system automation investments. • **Technology—**Technology plans that include deployment of systems to help improve operations (CIS, AMI, SCADA, AV and OMS) as well as enhance cyber and physical security. • **Human Resources—**Succession plans for staff and board and education plans for staff and board. • **Power Supply—**Distributed generation/energy resources plans and power supply cost evaluation plans. • **Corporate—**Economic development plans that address sales growth, state and federal regulatory issues, and proper cooperative governance.	A. Develop challenging, measurable goals that address the top four to five critical strategic issues to support the cooperative's future vision as included in the final strategic plan. Utilizing a neutral facilitator through CFC's Strategic Services Group to achieve this can be helpful. B. CEO assigns goals to specific individuals, establishes the framework for interdepartmental action plans, and assigns resources to develop and maintain the plans. C. CEO works with staff to establish reporting tools, consistent reporting frequency for the organization, and timing for accomplishing strategic plan goals.	CFC Compass Forecasting Tool Equity Management Utilization of CFC Strategic Services Group

STRATEGIC PLANNING (CONTINUED)

EXHIBIT 3A

ACTION	IMPLEMENTATION SUMMARY	RELATED RECOMMENDATIONS
7 Each department should then develop a two- to three-year action plan that supports the cooperative's strategic plan goals. These plans include: • Strategic initiatives in consistent formats that roll up into interdepartmental and cooperative strategic plans. • Estimated time frames for completion. • Annual budgets and resource allocations adequate to achieve the target results.	A. For each department, identify initiatives needed to achieve strategic goals. B. Determine resource requirements and obtain requisite approvals for establishing the resources. C. Establish deadlines and budgets. D. Establish a consistent tracking tool for the organization and consistent reporting frequency for the organization	Utilization of CFC Strategic Services Group
8 The cooperative should develop a corporate guideline for regular reporting to both the board and management on progress of the strategic plan.	A. CEO and board establish a regular strategic plan reporting cycle—monthly, quarterly or semi-annually. B. Establish a standard process to address changes in the strategic goals. C. CEO works with management staff to establish a time frame for internal reporting and reporting to the board.	Utilization of CFC Strategic Services Group
9 The cooperative should communicate the strategic plan to stakeholders.	A. Educate all stakeholders on the strategic plan and how their critical role ties to the success of the strategic plan. B. Provide regular communications on progress of the strategic plan and changes that need to be made, and why, to internal and external stakeholders.	Utilization of CFC Strategic Services Group

COOPERATIVE BOARD POLICY TEMPLATE

EXHIBIT 3B

SUBJECT: STRATEGIC PLANNING

I. PURPOSE

To set forth policy relating to the development, implementation and monitoring of the cooperative's mission, organizational statements, strategic goals and initiatives, and supporting action plans.

II. POLICY

It is the policy of the Board of Directors of this cooperative to guide the conduct of its business by means of thoughtful, fact-based strategic planning. To that end, a status update of the cooperative's strategic plan will be provided to the board of directors as frequently as agreed upon by the board and management.

III. EXPECTATION

A. The cooperative's strategic planning shall be based upon careful consideration of its:

1. Mission: A statement of member needs being met, member groups whose needs it satisfies, and the cooperative's approach to delivering value and meeting needs.
2. Strategic Vision: A statement of the cooperative's aspirations as well as its member and business focus over the next two to three years given changing economic, regulatory, demographic, technological and other conditions.
3. Core Values: The key values that support the mission and vision of the cooperative.
4. Critical Issues: Items that board and management need to address for the long-term success of the cooperative.
5, Strengths, Weaknesses, Opportunities and Threats: A realistic assessment of the cooperative's internal capabilities and shortcomings, as well as potential positive and negative external developments and influences.

B. Setting Strategic Goals

The cooperative shall adopt specific, measurable two- to three-year strategic goals supporting its present mission, vision and values while considering its strengths, weaknesses, opportunities and threats as well as critical issues. These will center on the following areas:

A. Financial goals that set realistic benchmarks for equity management, adequate cash flow through sufficient rates and access to financing.
B. Member relations goals that measure satisfaction toward the cooperative.
C. Operations/reliability goals that ensure reliable service to its members.
D. Power supply goals that ensure adequate, reliable and competitive supply resources.
E. Technology goals that encourage use and deployment of industry-standard technology for the well-being of the membership.
F. Human resource goals that allow the cooperative to employ adequate staff to support operations and initiatives.
G. Corporate goals that allow the cooperative to enhance economic development, support federal and local government efforts for improving the local quality of life, and other performance indicators.

C. Development and Implementation of Action Plans

Management shall be held accountable for achievement of the cooperative's strategic goals. Obtaining required interim and final results will occur after development and diligent execution of two sets of action plans:

1. High-level, joint interdepartmental action plans to ensure the success of strategic objectives.
2. Detailed departmental action plans developed to accomplish specific results and identify staffing and budget requirements over the planning horizon.

IV. IMPLEMENTATION AND COMPLIANCE

Implementation: The Board of Directors shall annually review this policy to ensure it stays relevant in a rapidly evolving industry.

Compliance: Management will routinely report to the board regarding compliance and the management team's progress toward achieving strategic goals, as well as opportunities to improve the cooperative's strategic plan and this policy.

The initial policy was established by the Board of Directors at its meeting (date).

APPROVED: ______________________________

Principle-Centered Leadership and Service: Code of Ethics

Over the past several decades, the news media has seized on how the lack of good corporate governance and ethics has spawned scandals fueled by greed and mismanagement. In a major response to corporate scandals Congress enacted the federal Sarbanes-Oxley Act of 2002. The law generally applies to companies that have securities registered with the U.S. Securities and Exchange Commission (SEC).

While Sarbanes-Oxley requirements relating to implementing a code of ethics for chief executive officers and senior financial managers apply only to public reporting companies, the SEC rule has become a model of corporate best practices.

Exhibit 4A, "Cooperative Board Policy Template: Code of Ethics," summarizes five actions to consider when developing and maintaining an effective code of ethics. The exhibit also provides implementation guidance.

DEFINING FUNDAMENTAL COOPERATIVE VALUES

Since a code of ethics, sometimes called a code of conduct, helps encourage common ethical values, the board and senior management should use the code to set forth their basic position on core ethical values (respect, trust, integrity, honesty, loyalty, etc.). Periodically, the board and management might want to reconsider definitions of the cooperative's fundamental values and how they are embraced by the organization.

A code of ethics/code of conduct should be in sync with a cooperative's culture. This code should include a set of behaviors that logically fits into the way a cooperative treats its employees and generally approaches its business. For most electric cooperatives, the code offers general guidelines, without spelling out exactly what should be done in each situation.

Do not use an "off the shelf" code of ethics. Each code will vary based on the size of the cooperative, the complexity of its business and history. For example, cooperatives subject to state regulation will probably need very specific policies that address compliance with particular laws. If a cooperative wants to implement an effective code of ethics, it should devote the time and resources to developing one that fits its particular needs.

A code of ethics should be a board policy and state the values of the cooperative and how such values will be followed by everyone—from the boardroom to the employee lunch table. To be effective, senior management and the board of directors should support the code by "walking the talk." Staff will learn from emulating the behaviors of senior management and the board. Senior managers and directors should be model citizens who follow the letter and spirit of the code and encourage others to do the same. If this does not occur, then the code can become a basis for conflict and resentment between senior management and staff.

DOCUMENTATION

A code of ethics serves as an excellent resource for employees who face ethical dilemmas. Staff may not know how to behave when placed in certain situations. The code of ethics can spell out what conduct is acceptable and what is prohibited. If appropriate training is provided, and staff are encouraged to seek assistance in situations that may not clearly fall within parameters of the ethics code, then it is likely that inappropriate behavior will be significantly reduced, if not altogether avoided.

Conflicts of interest should be described and defined in policies that directors and employees can reference when trying to discern whether or not a conflict of interest, or perception of such, exists. For example, the code may contain a statement as follows:

> ***"A conflict of interest exists when the private interest (financial or otherwise) of a director, employee or their related parties interferes, or appears to interfere, in any way with the interests of the cooperative."***

This sample language addresses how to avoid even the appearance of a conflict of interest. It is important to expand conflicts of interest to cover parties that are related to the individual. "Related parties" may include entities where the individual serves as an officer or director, entities controlled by the individual or any close relatives of the individual. It also may be prudent to set forth some specific examples of conflicts that are germane to a cooperative's business.

Obviously, ethical behavior includes compliance with applicable law. Some cooperatives have extensive legal compliance policies that are completely separate and apart from their codes of ethics.

A cooperative should have an effective records retention policy prohibiting the destruction of documents that it is legally required to maintain. For those systems that borrow from the Rural Utilities Service, (RUS) Bulletin 180-2, "Record Retention Recommendations for RUS Borrowers," may provide helpful guidance.

EMPLOYEE TRAINING, RECOGNITION

A written code of ethics will not meet a cooperative's objectives unless accompanied by appropriate communications and training. Development of a code of ethics should include consideration of how the code will be rolled out to the cooperative (including, specifically, whether employees should be required to acknowledge receipt of the policy in writing). Questions to address include "How will new employees be apprised of the policy?" and "How will the fundamental principles of the policy be emphasized in a changing business environment?"

If expectations are not clearly set forth and communicated to employees, then a cooperative might experience difficulty with the next element—accountability.

A code of ethics is more than another written policy. Even well-written codes of conduct become problematic if employees never actually follow them or are encouraged to act in direct violation of the code. A code of ethics should be an integral part of a cooperative's culture.

A code of ethics instructs employees about fundamental principles important to the cooperative (e.g., respect, trust, integrity, honesty, loyalty). It tells employees which behaviors are and are not acceptable. A code of ethics should set forth principles that support a cooperative's mission, vision and values. It should instill a common understanding of what is considered good conduct.

"A conflict of interest exists when the private interest (financial or otherwise) of a director, employee or their related parties interferes, or appears to interfere, in any way with the interests of the cooperative."

REPUTATION = COMMUNITY IMAGE

Members expect their cooperative to follow a business code of ethics. To be proactive, a cooperative may want to go beyond adopting a code of ethics and also consider including the code or portions of it in its annual report and/or on its website. This way, the cooperative promotes itself as a good corporate citizen while communicating its principles to the community.

Vendors and other contractual parties may also require that a cooperative have a code of ethics as a condition of doing business. Insurance companies providing director and officer liability coverage generally ask for evidence that a cooperative has effective means of dealing with conflicts of interest.

EFFECTIVE ENFORCEMENT

For a code of ethics to be effective, it should contain a mechanism for reporting unethical behavior and addressing violations. By encouraging the reporting of infractions, a cooperative can discover and address a problem before it becomes a larger issue or, in the case of a violation of law, is reported to governmental authorities. There should be more than one avenue available so that employees do not have to report violations to the wrongdoer (e.g., violations may be reported to the CEO/general manager, to an employee's supervisor, to designated representatives of the human resources staff and/or to designated representatives of the legal staff). By holding staff accountable for ethical conduct, a cooperative may mitigate the risk that is inherent in unethical and illegal conduct.

Finally, a cooperative shouldn't bother to create an ethics policy unless it plans to enforce it. The existence of a code of ethics that is not followed in practice may be more detrimental to a cooperative than not having a policy at all. Once it is created, management has an obligation to abide by the code and hold staff accountable for compliance. If there are neither consequences for noncompliance nor incentives for compliance, or if the terms of the code are waived whenever there is a violation, then the code will not meet its primary objectives: complying with applicable law, instilling ethical values and mitigation risk.

BOARD POLICY DIRECTING CREATION OF A CODE OF ETHICS

Exhibit 4A, "Cooperative Board Policy Template: Code of Ethics," contains a sample policy directing management to prepare a proposed code of ethics for approval by the cooperative's Board of Directors, to enforce the approved code and to report ethics-related matters to the board. The sample policy specifies objectives of the cooperative's code of ethics and matters to be addressed by it.

CODE OF ETHICS

Exhibit 4B "Cooperative Code of Ethics Template" shows a sample code—a statement of the cooperative's values that delineates their meaning and how directors and employees will abide by them.

ADDITIONAL RESOURCES

- *"Governance & Accountability in Today's Business Climate: How Do Electric Cooperatives Measure Up?" NRECA Management Quarterly, Fall 2003, Vol. 44 No. 3.*
- *The Center for Corporate Citizenship at Boston College, www.bc.edu/corporatecitizenship.*
- *International Business Ethics Institute, www.business-ethics.org.*

COOPERATIVE BOARD POLICY TEMPLATE

EXHIBIT 4A

SUBJECT: CODE OF ETHICS

I. PURPOSE

To set forth policy regarding development and enforcement of a Code of Ethics to guide the ethical behavior of members of the Board of Directors, management and staff.

II. POLICY

It is the policy of the Board of Directors that the highest level of ethical behavior will be required of its members and others employed or otherwise associated with the cooperative who are involved in carrying out the business operations and delivery of cooperative services and dealing with each other, consumer-members and the general public. In addition, the board will periodically update and restate its standards in a published Code of Ethics that shall be made available on an annual basis to all directors, employees and others with whom the cooperative has a business relationship.

III. EXPECTATIONS

A. The cooperative's standards of ethical behavior will be defined and communicated, generally, to deter wrongdoing and to promote:

1. Honest conduct, including the ethical handling of actual or apparent conflicts of interest between personal and cooperative business relationships.
2. Full, fair, accurate, timely and understandable disclosure in the cooperative's periodic internal and external reports.
3. Compliance with applicable governmental rules and regulations.
4. Prompt internal reporting of code violations to persons identified in the code or the cooperative's "Whistleblower Policy."
5. Accountability for adherence to the code.

B. Matters to be Addressed in the Code of Ethics

The cooperative's Code of Ethics will address the following:

1. A general statement of the cooperative's business philosophy and position on respect, trust, integrity, honesty and other core ethical issues.
2. Legal requirements imposed by state or other regulatory agencies.
3. Compliance with applicable law including whistleblower protection and records retention.
4. Conflicts of interest including contractual relations involving the cooperative, gifts to or from board members or employees in consideration of business opportunities with the cooperative, outside activities that might impair the cooperative's business or use of cooperative property for personal purposes.
5. Confidential cooperative information.
6. Preparation of the cooperative's annual report, press releases and other public disclosures to ensure they are accurate, complete and understandable.
7. Reporting of violations of the cooperative's Code of Ethics will be facilitated by multiple alternative reporting procedures along with timely and fair processes under which management will investigate reports and protect employees or others who report apparent violations in good faith.
8. The mechanism for holding board members and employees accountable for compliance with the Code of Ethics.

IV. IMPLEMENTATION AND COMPLIANCE

Implementation: The Board of Directors shall be accountable, along with management and the cooperative's legal counsel, for developing and periodically reviewing this policy and for the approval and implementation of a Code of Ethics that complements the intent of this policy.

Compliance: The board chair/president is responsible for keeping board members and the CEO aware of their obligations under this policy and Code of Ethics.

(CONTINUED)

COOPERATIVE BOARD POLICY TEMPLATE

The CEO is responsible for ensuring that all cooperative employees have been provided a copy of the Code of Ethics, and that they are aware of their expected compliance responsibilities.

The CEO will advise the board of needed revisions to this policy and the Code of Ethics, and the CEO will report any employee infractions of this policy or Code of Ethics to the board. This policy and Code of Ethics will be reviewed by the board annually.

The initial policy was established by the Board of Directors at its meeting (date).

APPROVED: ____

EXHIBIT 4A

COOPERATIVE CODE OF ETHICS TEMPLATE

EXHIBIT 4B

PREAMBLE

"XYZ Electric Cooperative is committed to adhering to and demonstrating our values of fairness, integrity, accountability, responsibility and transparency in all our governing and business operating practices. These values are incorporated into our respective governing and operating and personnel policies. All directors and employees of XYZ Electric Cooperative are expected to demonstrate our values by complying with our policies and practices when dealing with coworkers, members, suppliers, public bodies and all others having dealings with the cooperative. At any time, if a member, director or employee reasonably suspects that an XYZ Electric Cooperative activity or action may be in violation of the law, polices or the intent of the Code of Ethics, they are encouraged to bring such to the immediate attention of XYZ Electric Cooperative board and management and the cooperative's legal counsel."

FAIRNESS

The cooperative's directors, management and all other employees will seek to use fair and open practices and procedures and be truthful in all communications with members, each other, vendors and others.

- All directors and employees will balance a member's right to know about information that is germane to them as a consumer and owner with an understanding that some information must be maintained as confidential in accordance with laws, policies and regulations to ensure employee and member privacy and security of the cooperative's records and operations.

INTEGRITY AND ACCOUNTABILITY

The cooperative's directors and employees will always seek to be fully open and honest in conducting business on behalf of the cooperative and when communicating with the public.

- Directors and employees are expected to uphold the values and policies of the cooperative and conduct themselves in a professional, courteous and ethical manner at all times.
- Directors and employees are expected to deal honestly with members, suppliers and all others with whom the cooperative has a working relationship.
- Initiating and/or accepting bribes, kickbacks, gifts above a nominal value or other forms of personal remuneration, as well as stealing, falsifying records or other criminal acts are prohibited.

RESPONSIBILITY

All directors and employees are responsible for ensuring that the cooperative's mission, goals, policies and plans are carried out with the intent of benefiting consumer-members' interests in and services from the cooperative.

- All directors and employees are responsible for the accuracy of their work-related actions and for compliance with all cooperative policies, practices and procedures.
- All directors and employees will avoid conflicts of interest, real or perceived, and disclose any potential conflicts that could reasonably be deemed to influence their business judgment.
- Officers and staff who are charged with maintaining the cooperative's financial records are responsible for ensuring that the cooperative complies with generally accepted accounting principles, maintaining a system of internal accounting practices controls and providing reasonable assurances that such information and records are properly retained and secured.

TRANSPARENCY

All directors and employees will be forthright and truthful when dealing with each other and when providing information about the cooperative that members are entitled to by:

- Responding within a reasonable time and courteous manner to questions and concerns of members and management.
- Acknowledging unintentional mistakes and correcting them promptly and prominently. In doing so, they will be expected to clearly and completely explain corrective actions taken to rectify them.

OVERVIEW

CHAPTER 5: FINANCIAL LITERACY: UNDERSTANDING THE BOARD'S ROLE

To meet their financial stewardship responsibilities, directors should know enough about current business and finance issues, planning, risk control and the cooperative's finance and accounting functions to perform their duties.

CHAPTER 6: BUSINESS PLANNING FOR ELECTRIC COOPERATIVES

Cooperative business planning integrates the strategic plan conclusions with market research, revenue and expense forecasts, construction work plans, risk assessments, human resources needs and financial information system enhancements to set intermediate-term goals and manage toward them. The board's responsibility is to see that management accomplishes this work, but not to interfere in either its development or business plan execution.

CHAPTER 7: FINANCE, ACCOUNTING FUNCTIONS BEAR BEST PRACTICES BURDEN

Financial plan development, capital budgeting, operational budgeting, monthly reporting, regulatory and contractual compliance, and coordination of the cooperative's annual independent audit are all areas requiring staff attention to best practice adoption. The board's policies should support operational excellence in these functions as well as others proposed by management.

CHAPTER 8: CASH MANAGEMENT MAKES THE MOST OF A COOPERATIVE'S MONEY

Maximizing a cooperative's return on cash investments and planning for appropriate short-term borrowing also calls for implementation of modern techniques. These include careful management of relations with financial institutions, cash collections, forecasting funds availability and prudent portfolio management.

CHAPTER 9: HOW (AND WHY) COOPERATIVES SHOULD MANAGE THEIR DEBT PORTFOLIOS

A cooperative's management and board should agree on their collective interest rate risk tolerance in choosing among conservative, moderately risky and aggressive debt portfolio structures. Then, best practices can be found and adopted for credit market monitoring, forecasting capital needs, staying current regarding available debt alternatives and modeling the organization's operations. Special techniques should also be considered for making prudent use of variable-rate and fixed-rate debt, along with evaluating fixed-rate conversions.

CHAPTER 10: EQUITY MANAGEMENT—ACHIEVING A BALANCE

Five best practices aimed at progressing toward an overall low cost of capital are the bases of equity management:

1. Debt/equity ratio targeting.
2. Regulatory compliance.
3. Member relations cultivation.
4. Judicious use of special patronage capital retirement methods.
5. Documentation of a cooperative's overall equity management plan.

"Stewardship is the passion and discipline to judge wisely and objectively to protect and promote the long-term well-being of others."

—LeaderMetrics© 3ethos, Mystic, CT

Financial Literacy: Understanding the Board's Role

The board of directors has two general financial stewardship responsibilities with respect to ensuring cooperative financial best practices and policies:

- Hire a competent CEO/general manager who will identify and implement state-of-the-art procedures and technologies to ensure the cooperative's competitiveness and business community leadership.
- Be familiar with financial best practices for the not-for-profit cooperative business model and adopt policies that support these best practices.

Electric cooperative boards of directors have several essential responsibilities. One of their key tasks is selecting and evaluating the performance of their cooperative's CEO/general manager and hiring the cooperative's legal counsel and a qualified and independent auditor. They also help guide the wise development of strategic and business plans and oversee the practical implementation of these strategies by management. Another responsibility of the board is crafting cooperative policies, with the help of management and counsel, and overseeing enforcement of those policies.

Like all electric utilities, electric cooperatives are highly capital intensive. This demands that special attention be paid to financing, control of assets, accounting and reporting on results of operations and cash flows, compliance with debt agreements and, in general, stewardship of the consumer-members' enterprise. To effectively oversee and provide policy direction for those financial and accounting functions, board members should be financially literate—possess a good understanding of core principles for establishing and improving accounting, planning, rate-setting, budgeting, cash management, financial reporting and related systems.

Attaining sufficient financial literacy to govern an electric cooperative may be challenging, but it can be achieved through key actions:

- Continuous education from cooperative management regarding routine business processes and significant transactions.
- Regular reading about business finance developments and discussions with cooperative staff as well as other professionals.
- Periodic meetings with independent auditors and legal counsel.
- High-level participation in strategic planning, budgeting, internal control evaluation and similar cooperative activities.
- Participation in educational opportunities offered by CFC, local colleges, NRECA and other organizations.

Following this chapter, Exhibit 5A, "How to Promote Director Financial Literacy," outlines seven proposed actions that can help board members in this area.

FINANCIAL PLANNING

Financial planning remains as important to electric cooperatives as distribution system construction and replacement planning. It is needed to ensure that:

- Electric rates are generating sufficient revenue to repay debt.
- Total costs of operating the business are appropriate to keep the cooperative competitive.

Directors should be familiar with financial modeling methods used by the cooperative and the input data and assumptions adopted for various scenarios. When undertaking financial planning, it's a good idea to prepare two or more scenarios: one based on the most-likely input assumptions and one or more sensitivity (or greatest threat) analyses based on potential variances to the most-likely scenario. A sensitivity scenario should be seriously considered when evaluating the cooperative's future risk situation, as strategic and business plans are closely connected to the financial planning process.

PRODUCTIVITY, PERFORMANCE, COMPARISON

Electric cooperatives are unique businesses in their communities. Therefore, directors usually need data comparing operations with other electric cooperatives. CFC's Key Ratio Trend Analysis provides valuable data by which to judge a cooperative's efficiency. In using such comparisons, care is needed to take into account differences between operating factors such as weather, consumer density, regulation, competition and terrain. A cooperative's external auditor may be another source of assistance in evaluating the efficiency and effectiveness of various cooperative activities.

DEBT FINANCING

Loans and other forms of debt usually are vital financing methods for most electric cooperatives, so it is important that directors understand the differences between their borrowing alternatives. For example, interest rate options (variable, fixed or adjustable), principal amortization alternatives (level debt service, level principal plus interest), balloon payments and prepayment costs are all important considerations in managing a cooperative's debt portfolio.

Equally important are covenants (borrowers' commitments) that lenders require of a cooperative. These are likely to include, but are not limited to, achievement of an earnings coverage ratio each year, limitations on other borrowings, submission of annual compliance certificates and maintenance of specified insurance protection.

FINANCIAL REPORTING, AUDITING

A cooperative's interim and annual financial statements are fundamental tools for the board's financial oversight. To be most effective, board members should understand financial information systems, estimates and accounting principles used to create the cooperative's financial statements. The interpretation of statements of income and cash flows, as well as balance sheets and related footnotes, requires study and practice.

Cooperative management is responsible for preparation of both monthly and annual (audited) financial statements. Management should provide the board with clear explanations of how the statements are prepared and what they mean. A cooperative's independent auditors are also a valuable resource for learning about accounting policies, the reporting of major transactions, footnote disclosure requirements and the significance of their audit reports.

INTERNAL CONTROL

Protecting cooperative assets and presenting an accurate financial picture requires effective accounting and other internal control processes. These controls include separation of personnel duties between handling assets (such as vehicle fuel, scrap construction materials or member payments) and maintaining related accounting records. Enforcement of policies and codes of ethics is also a means of reducing control risks. (An entire chapter on internal control is included in this guide.)

On a monthly basis, board members can promote the protection of assets and reliability of financial statements by closely examining monthly financial reports for unexplained budget variances or unusual fluctuations in income statements or balance sheet amounts.

SETTING RATES, TERMS OF SERVICE

Rates and terms of service have a direct impact on cooperative members, as rates are the primary source of cash to pay both operating and capital costs. They are also the focal point of public opinion regarding a cooperative's competitiveness and its ability to attract industry and jobs to its service area.

Directors should consider studying alternative approaches to, among other things, rate-setting (such as cost-based rates versus market-based rates), consumer security deposits, line extension reimbursements, load management and contributions-in-aid-of-construction.

Rate structures and levels and terms of service of nearby electric utilities also might be considered to effectively oversee management's administration of this important function.

BOARD POLICY TEMPLATE

Accompanying Exhibit 5B, "Cooperative Board Policy Template: Board Financial Literacy," contains a sample policy that includes educational elements to be covered in preparing the board for its financial oversight role. It also provides guidelines for continuously strengthening those competencies and contributing to a cooperative's success. These include the following key ideas:

- The board's role is one of oversight, carefully avoiding interference in the day-to-day work of management and staff.
- Cooperative reimbursement of board member training costs may be limited to those pre-approved and consistent with amounts spent on training per employee.
- At least once each year the board should evaluate its understanding of the issues discussed above and undertake appropriate improvement initiatives.

HOW TO PROMOTE DIRECTOR FINANCIAL LITERACY

EXHIBIT 5A

ACTION	IMPLEMENTATION SUMMARY	RELATED RECOMMENDATIONS
1 The board regularly reviews the cooperative's financial planning process and discusses improvement opportunities with management, including: • "Most-Likely" scenario assumptions regarding consumer demand growth, rates, debt/equity ratios, patronage retirements, capital costs and needs. • Special sensitivity (or greatest threat) scenarios. • Contingencies and risk management.	A. Provide the board with a summary of the cooperative's strategic, business and financial planning processes, including sample reports and related documents. B. Discuss the planning processes and the key input assumptions to financial planning. C. Demonstrate financial plan outputs to "Base Case" and "Sensitivity" (or greatest threat) scenarios. D. Obtain board recommendations for process and input improvements.	Cooperative Business Planning Equity Management
2 The board compares the cooperative's productivity, efficiency and financial performance with other electric cooperatives and the board studies: • Cooperative expenses per kWh, consumer or other measure. • Total utility plant investment per consumer, mile of line and kWh. • Revenue, power cost, debt service coverage and other statistics.	A. Review CFC's Key Ratio Trend Analysis and other sources of comparative data with the board. B. Discuss potential reasons for cooperative ratio differences from reported averages of other electric cooperatives. C. Discuss how management plans to improve the cooperative's performance and how board decisions might have an impact on future ratios.	
3 The board routinely examines various features of the cooperative's debt financing alternatives, such as: • Mortgage and other security provisions. • Interest rate levels, adjustment modes and hedging opportunities. • Prepayment costs and conditions. • Principal amortization alternatives.	A. Summarize for the board key terms of debt financing available to the cooperative, including security requirements, covenants and default consequences and interest rates. B. Review the cooperative's expected financing needs and the pros and cons of equity, debt and other financing. C. Discuss board recommendations regarding debt portfolio management.	Debt Portfolio Management

HOW TO PROMOTE DIRECTOR FINANCIAL LITERACY (CONTINUED)

EXHIBIT 5A

ACTION	IMPLEMENTATION SUMMARY	RELATED RECOMMENDATIONS
4 The board reviews and understands the cooperative's accounting, financial reporting and auditing processes, including matters such as: • GAAP and differences between the cooperative's annual audited financial statements, the "Uniform System of Accounts" and its monthly financial and statistical reports. • The cooperative's accounting system and financial statement preparation.	A. Review the cooperative's audited financial statements with attention to Generally Accepted Accounting Principles and the auditors' opinion and contrast them with the cooperative's monthly financial reporting. B. Discuss the cooperative's choices of accounting policies with management and independent auditors. C. Review any material accounting adjustments resulting from the annual audit.	Audit Committee
5 The board routinely evaluates and understands budgetary, duty segregation, policy and procedure development and enforcement and other elements of the cooperative's internal control system, including: • Consideration of the respective roles of management and independent auditors in design, operation and testing of internal control. • Assessment of the cooperative's internal control-related risks and cost-benefit analysis of potential solutions.	A. Discuss internal control system concepts, objectives and design with cooperative management and independent auditors. B. Study the auditors' management report and evaluate management responses and corrective actions. C. Arrange closed-door session for board to discuss GAAP and internal control issues with the cooperative's independent auditors.	Internal System of Controls
6 The board reassesses at least once a year the cash and investment management policies and procedures of the cooperative to: • Accelerate cash collections into interest-earning accounts or investments. • Ensure strong internal controls over cash and investments. • Limit investments to safe assets.	A. Present a summary flow chart of the cooperative's cash flows to the board and discuss factors influencing the need for working capital and cash. B. Review internal control over cash and investments and criteria for assessing investment instruments and their associated risks. C. Discuss board recommendations for improving its cash and investment management policy.	Cash and Investment Management

(CONTINUED)

HOW TO PROMOTE DIRECTOR FINANCIAL LITERACY

EXHIBIT 5A

ACTION	IMPLEMENTATION SUMMARY	RELATED RECOMMENDATIONS
7 The board annually evaluates the cooperative's cost-of-service, rate design and terms of service, including: • Compliance with regulatory requirements. • Rate competitiveness. • Line extension cost recovery. • Large customer margin contributions.	A. Explain the cooperative's cost-of-service, rate-making and fee-setting methodologies and relevant regulations to the board. B. Compare the cooperative's rates with those of competitors and explain significant differences. C. Discuss board suggestions for improving rate design and fee-setting.	Finance and Accounting Best Practices

COOPERATIVE BOARD POLICY TEMPLATE

EXHIBIT 5B

SUBJECT: BOARD FINANCIAL LITERACY

I. PURPOSE

To set forth the board's policy for ensuring that board members are sufficiently knowledgeable and experienced about critical finance and accounting functions to govern the cooperative.

II. POLICY

It is the policy of the Board of Directors of this cooperative to ensure the financial literacy of its members by active oversight of key finance functions, individual learning and formal education.

III. EXPECTATION

Each member of the Board of Directors will study and participate actively in oversight of key finance functions, including those listed below, so as to understand their purposes and general mechanics sufficiently to govern the cooperative:

1. Financial planning, including its relationships to the cooperative's business plan.
2. Equity management, computer modeling and interpretation of alternative scenario outputs.
3. Comparative performance analysis of financial, service quality and productivity indicators.
4. Evaluation of the cooperative's debt financing alternatives and their respective covenants and security requirements, interest rate modes, principal amortization methods, prepayment costs and other features.
5. Preparation of the cooperative's monthly and annual financial statements with footnotes and choices of accounting policies.
6. Design, operation and evaluation of the cooperative's internal control system and the role of independent auditors in testing the system during their examination of financial statements each year.
7. Management of the cooperative's cash flows, balances and investments to assure sufficient working capital as well as the efficiency and safety of temporarily invested funds.
8. Design and application of the cooperative's electric rate tariffs and terms of service, including security deposits and line extensions.

IV. IMPLEMENTATION AND COMPLIANCE

Implementation of this policy to continuously strengthen board member competencies with respect to the cooperative's finance and accounting functions is the responsibility of the Board of Directors subject to the following guideline:

> The staff, with approval and under the direction of the CEO/general manager, will provide information regarding the cooperative's financial planning and operating processes that can enhance director financial competencies.

Compliance with this policy is the responsibility of the board. The board will authorize management to reimburse board members for training program costs that are approved by the board and/or approved in the budget.

This initial policy was established by the Board of Directors at its meeting (date).

APPROVED: ______________________________________

The fundamental purpose of electric cooperative business planning involves connecting the organization's strategic plan (including its three- or five-year vision and specific objectives) to its traditional construction work plans, budgets and staffing program.

Exhibit 6A, "How to Implement Business Planning," describes several actions that can assist cooperatives in working toward one- or two-year objectives. Examples of implementation steps are also presented for each proposed practice.

PLANNING MADE SIMPLE

The complexity of the business planning process can be a major stumbling block to its effective, practical execution. This process can be simplified by beginning with a tangible result in mind and sticking to a list of core components that can be conveniently assembled and updated.

Such a document should include available components such as strategic objectives, staff plans and budgets. Connective links like explanations of the materials or other updates also can be included in the plan.

The business plan's monthly format might include the following components:

- Balanced scorecard goals and supporting departmental plans from a cooperative's strategic planning process.
- Annual goals, staffing plans and budgets for each department.
- Plans, progress reports and exit triggers for diversification businesses.
- "Most-Likely" and "Sensitivity" (or greatest threat) scenario financial forecasts.
- Financial statements and budget variances.
- A one-page narrative explaining material deviations from plan.

MARKET RESEARCH

Most cooperatives deal with multiple groups of external, influential stakeholders—residential, commercial and other consumer rate classes, key accounts, local government officials, opinion leaders and economic development agencies. Their support of both a cooperative's core electric utility and any diversified businesses is crucial to success. That's why a cooperative should understand their attitudes, preferences, energy service alternatives, demographics and other characteristics. Market research can unlock these answers.

The first step in developing a comprehensive market research program involves specifying a cooperative's information needs about stakeholder groups, competitors and business conditions. Next comes the information-gathering stage that may include mail surveys, focus groups, one-on-one interviews or other valid techniques. Ultimately, effectiveness of a cooperative's program may be determined by the scope and regularity of its research routine.

EXAMINING RISKS

Business planning complements and extends a cooperative's strategic planning process. The risk assessment process that goes along with business planning also enhances a cooperative's strategic plan by extending the long-range SWOT analysis.

The SWOT analysis contributes to the task of defining risks and helps guide annual departmental goals, comprehensive staffing plans and budgets. For example, short-term opportunities to refinance high-interest rate debt should be seized by a cooperative's finance department as a goal, and sufficient funds budgeted for analytical computer tools, as needed.

Effective risk assessment usually requires that subject-matter experts (mainly cooperative employees rather than the CEO/general manager) examine each aspect of a cooperative's business to identify risks. Some organizations also solicit risk nominations from employees using anonymous surveys. Once the risks have been identified, they should be prioritized by the CEO/general manager or an independent consultant.

FINANCIAL INFORMATION SYSTEMS

Timely and reliable financial information, both historical and projected, stands as an important element of a successful business plan. Each cooperative's needs are unique, but the following are typical components of modern financial information systems:

- Models for projecting financial results of core electric utility and diversified business operations under alternative scenarios.
- Activity unit cost data (e.g., cost per consumer bill processed) facilitating productivity improvements.
- Cost allocations between core electric operations and other services.
- Timely financial statements and budget variance analyses.

The assessment of a cooperative's financial information system often begins by defining its requirements. This means asking questions such as:

- Are we on course to meet this year's TIER (times interest earned ratio) and debt service coverage (DSC) goals for our core electric and diversified businesses?
- Are we continually improving the productivity of our operations?
- Over the next few years, are we likely to be able to keep our rates competitive while meeting our debt service requirements and fairly compensating our employees?

If the answer to any of these queries is "We don't know," then a cooperative's financial information systems probably need strengthening.

MONITORING GOVERNMENT AND REGULATORY TRENDS

Electric cooperatives are unique business and social institutions with special capabilities and responsibilities. They need support from regulatory and local government agencies to operate efficiently, promote community development and protect their service areas. Proactive programs to participate in civic affairs; to communicate with regulators, legislators and other government officials; and to promote cooperative services are vital to helping a cooperative achieve its business plan objectives.

It's a good idea to identify government and civic organizations of particular importance, and then assign staff personnel to gather information about them and maintain contact with them. Next, specific goals should be set for relations with each organization—perhaps routine participation by cooperative staff or more tangible results such as public support for a legislative position. Finally, each organization's staff liaisons should deliver periodic reports on intelligence gathered, actions taken and results achieved in advancing a cooperative's business plan objectives.

HUMAN CAPITAL

A cooperative's business plan objectives can only be reached through the efforts of its employees. The care, development and organization of its personnel are, therefore, critical to success.

Cooperatives should have a coherent program that addresses personnel needs, including:

- Accurate position descriptions connecting daily work and a cooperative's objectives and values.
- Continuous employee training and periodic performance assessments.
- Compensation programs consistent with cooperative culture, objectives and market conditions.
- A current staffing plan that addresses a cooperative's future recruitment, retention and training needs.

Input from the organization's human resources professionals or consultants might be needed to develop the human capital needed for business plan success.

DISCIPLINED MANAGEMENT

While management and staff are vital to carrying out a cooperative's business plan, the Board of Directors bears ultimate responsibility for the oversight of disciplined preparation and execution of the plan. To keep the board informed and updated, management should routinely report on new consumer, competitive and other developments likely to have an impact on the cooperative. Any corrective actions that might be warranted should be reported on a regular basis. The format for business plan reporting should be as simple or as comprehensive as the board desires to best understand the extent of progress.

BOARD POLICY

Exhibit 6B, "Cooperative Board Policy Template: Business Planning," provides a board policy for directing implementation of best practices for business planning. It can be tailored to fit the unique needs of each cooperative.

ADDITIONAL RESOURCES

- *"Starting Smart: A Guide to Convergent Business Planning," CFC Website, www.nrucfc.coop.*
- *Berry, T., "Hurdle: The Book on Business Planning," Palo Alto Software, Inc.*
- *Kaplan, R. S. & Norton, D.P., "The Balanced Scoreboard: Translating Strategy into Action," Harvard Business School Press.*

HOW TO IMPLEMENT BUSINESS PLANNING

EXHIBIT 6A

ACTION	IMPLEMENTATION SUMMARY	RELATED RECOMMENDATIONS
1 The cooperative will have a business plan document that facilitates easy updating and assembly and conveniently connects departmental goals, staffing and budgets, including: • Strategic goals and action plans. • Core electric utility business improvements in member service and construction productivity. • Subsidiary business goals, development status, gains and losses since inceptions and exit plans. • Alternative/renewable energy plans, options and mandates. • Separate and combined financial forecasts assuming most-likely and sensitivity (or greatest threat) scenarios.	A. Assemble existing business plan components, such as budgets. B. Schedule creation of missing components, such as strategic goals or departmental staffing. C. Experiment with assembly to derive the best combination of convenience and presentation. D. Update and prepare monthly updates for board meetings. E. Create and/or update a financial forecast a minimum of once per year.	Strategic Planning
2 The cooperative conducts substantive marketing research, including: • Attitudes, needs and preferences of its consumers. • The strengths and weaknesses of present and potential competitors including a review of pricing and quality of service. • Energy service alternatives for key accounts. • Service area economic trends and developments. • Technology and other developments that may affect consumer needs and service alternatives.	A. Specify information needs about consumers, competitors and business conditions. B. Design surveys, post-contact interview procedures and focus groups for objectivity and completeness. C. Execute, validate and interpret research results.	

HOW TO IMPLEMENT BUSINESS PLANNING

(CONTINUED)

EXHIBIT 6A

ACTION	IMPLEMENTATION SUMMARY	RELATED RECOMMENDATIONS
3 The cooperative's risk-management system routinely examines its organization and business environment to find threats and weaknesses, along with effective mitigations of those factors. Examples of sources of risk include: • Pressures and rewards for employee performance. • Inexperience of key employees. • Transaction complexity and weak reporting processes. • Effective direct and indirect competitors. • Adverse regulations or economic trends. • Evolution of technology. Methods for effective mitigation include: • Having organizational core values that are widely embraced. • Making sure that unacceptable behavior is clearly defined, understood and not tolerated. • A willingness to act early to neutralize future risks. • Defined corrective actions that will be taken and when.	A. With the help of subject-matter experts, examine each material aspect of the cooperative's internal and external business for risk indicators. B. Anonymously survey employees to identify conflicts of interest, management system weaknesses or other risks. C. Objectively evaluate discovered risks and implement corrective action plans.	Internal control system
4 Financial information systems provide complete, timely and accurate bases for decision-making. These systems include: • Monthly financial statements, budget variance analyses and operating statistics. • Activity unit cost data, with analyses to support productivity improvement. • Financial and operational projection modeling for most-likely, sensitivity and other relevant scenarios. • Cost allocation procedures between electric and other services.	A. Determine management information requirements to be satisfied by financial accounting, forecasting and other systems. B. Assess timeliness, accuracy and adequacy of existing reports. C. Implement improvements as needed to provide management information needed for business planning.	Finance and Accounting

(CONTINUED)

HOW TO IMPLEMENT BUSINESS PLANNING

EXHIBIT 6A

ACTION	IMPLEMENTATION SUMMARY	RELATED RECOMMENDATIONS
5 Trends and developments that have an impact on the cooperative's relations with regulatory and other government agencies are monitored and influenced as appropriate. These include: • Demonstrating active interest in local government affairs and representation at public meetings. • Involvement of members of the cooperative's Board of Directors and employees in service area civic organizations. • Community development using routine formal and informal contact with regulatory agencies. • Documentation of political and regulatory intelligence.	A. Identify each state and local government agency and civic organization of likely importance to the cooperative. B. Assign board members and staff as liaisons to each target organization. C. Assign a staff member of the cooperative to accumulate intelligence and recommend actions.	
6 A coherent program for attracting, developing and retaining the cooperative's human capital should be in place. This program should include: • A comprehensive staffing plan that identifies needed skills and people over time. • Position descriptions and other means of managing performance connecting daily work and the cooperative's goals. • Employee compensation packages consistent with the cooperative's culture, objectives and local market conditions. • Technical, professional and business training for employees.	A. Determine the cooperative's human resources needs in terms of functions to be performed, skills needed, and attraction and retention requirements and objectives. B. Design recruitment, training, compensation and positions to connect needs with local availability. C. Adjust program as needed.	Strategic Planning

HOW TO IMPLEMENT BUSINESS PLANNING (CONTINUED)

EXHIBIT 6A

ACTION	IMPLEMENTATION SUMMARY	RELATED RECOMMENDATIONS
7 The cooperative's Board of Directors requires management to report on business plan progress on a regular basis and expects the following to be addressed: • Anticipated new consumer, regulatory, competitive or other developments likely to have an impact on the cooperative. • Corrective actions to be taken and their expected consequences. • Recommendations for new cooperative business goals.	A. Structure the board meeting agenda to address business plan goals, results and next steps. B. Rotate board committee assignments to develop member expertise. C. Require special management reports as needed.	Directors' Responsibilities and Competencies

COOPERATIVE BOARD POLICY TEMPLATE

EXHIBIT 6B

SUBJECT: BUSINESS PLANNING

I. PURPOSE

To set forth policy relating to development and implementation of the cooperative's business plan connecting its strategic objectives and annual construction work plans, budgets and staffing program.

II. POLICY

It is the policy of the Board of Directors of this cooperative to guide, on an annual basis, the conduct of its business and community service by means of documented business planning. This business plan document will be as concise as possible but completely address each important aspect of its energy and other diversified services.

III. EXPECTATION

A. Foundations of Cooperative Strategic Planning

The cooperative's business planning shall be based upon careful consideration of its:

1. Strategic consumer, organizational development, financial and other objectives, and long-range plans for their accomplishment.
2. Competitive, regulatory, consumer demographic, technological and other trends that have an impact on the cooperative.
3. Support of the needs of consumers and service-area institutions that the cooperative is uniquely capable of addressing.

B. Business Plan Foundations

The cooperative shall develop and implement its annual business plan with consideration of the following foundations.

1. The business plan document will integrate its existing balanced scorecard, monthly financial and budget reporting, and other elements to minimize administrative burdens and focus on practical attainment of results.
2. Research regarding the preferences, attitudes and motives of each significant cooperative constituency will guide business plan development.
3. Material risks to the cooperative (including external threats, internal weaknesses and opportunities potentially missed) will be examined and mitigation approaches found.
4. The cooperative's financial information systems will be evaluated routinely as to their timeliness, accuracy and relevance for planning and assessing performance. They will be improved as necessary.
5. Governmental and regulatory trends likely to impact the cooperative's business plan will be monitored and influenced as appropriate.
6. The cooperative's human capital will be cultivated and motivated to support successful execution of its business plan.

IV. IMPLEMENTATION AND COMPLIANCE

Implementation: Management will be held accountable for the implementation of a business plan approved by the board that meets the intent of this policy. Management will routinely report to the board on the progress being made to meet the policy and plan objectives and offer recommendations to improve the plans and policy.

Compliance: The board chair/president or Budget/Finance Committee of the board will be responsible for ensuring compliance with this policy.

This initial policy was established by the Board of Directors at its meeting (date).

APPROVED: ________________________________

Finance, Accounting Functions Bear Best Practices Burden

Implementation of financial best practices required by management and policies adopted by the board falls primarily on a cooperative's finance staff. Cooperatives have a variety of names for referring to this part of their organization: business office, accounting department, finance or the administrative services group. But responsibilities are largely the same, and they usually include:

- Accounting (perhaps using a distant computer service center) and preparation of financial and operating reports.
- Internal control systems design, operation and testing.
- Processing purchase orders and paying vendors.
- Billing consumers for electric and other services and collection of accounts receivable.
- Filing all applicable tax returns.
- Maintaining payroll records and processing employee withholdings and payments.
- Managing the cooperative's cash, investments, equity and debt portfolio.

Effective performance of these responsibilities usually requires a combination of competent management direction, qualified staff and informed board oversight.

Management's job entails setting goals for finance and accounting functions and ascertaining that specific plans are developed and executed for their accomplishment. For example, a cooperative's capital budgets should work to simultaneously maintain targeted service reliability while minimizing overall financing costs. Of course, staff and procedures also need to be in place to deliver expected results.

Finance and accounting staff must have the skills, motivation and tools to do their jobs and take personal responsibility for their own capability development. Without interfering in the work of management or staff, the board needs to satisfy itself that the cooperative continuously explores and adopts feasible finance and accounting best practices, and that its policies appropriately stimulate and guide those efforts.

Exhibit 7A, "Key Considerations for Finance Staff & Operations," describes seven actions to create a well-managed, staffed and governed electric cooperative.

FINANCIAL PLANS

Electric cooperative success requires foresight regarding future load and energy demand, business environment, power supply and other costs, financing needs, and the impacts of all of those forces on rates charged to members. Accordingly, a cooperative should have a current, annually updated financial plan that includes projected financial statements, explanation and justification of input assumptions, and interpretation of output results.

At least two scenarios should be considered by the plan:

1. "Most-likely" assumptions regarding load growth, competition, construction requirements, inflation, interest rates and staffing requirements.
2. "Sensitivity" (or greatest threat) assumptions based on the least favorable, but plausible, levels.

The “sensitivity analyses” scenario contains business conditions a cooperative should be prepared for (but not necessarily used for rate-setting). Management’s tasks include preparation and execution of these plans, and the board’s responsibility is to question, understand and, ultimately, support them once approved.

CAPITAL BUDGETING

Electric cooperatives need long-lived utility plant assets financed by long-term debt and equity. They also must find a good balance between their investment to serve members and depreciation and interest costs borne by them. Getting to that balance starts with system engineering studies and construction work plans that consider future member service requirements, the need to renew or replace existing plant facilities, new technologies and other factors. One such factor may be board-specified reliability standards. Estimated costs of potential capital projects may exceed the cooperative’s ability to finance them or consumers’ willingness to pay for them, so they should be prioritized. Safety and regulatory considerations are important prioritization criteria; cost-benefit analyses should also be performed to ensure that discretionary plant investments pay for themselves.

Before the board approves each year’s capital budget, directors should review prior-year variance analyses to determine how well the process has worked. In addition, the board may wish to reconsider its line extension and contributions-in-aid-of-construction policies regarding consumer financing of some plant additions.

OPERATIONAL BUDGETING

Budgeting for revenue, expenses and margins starts with “most-likely,” “sensitivity” (or greatest threat) and, perhaps, other projections of revenue and power costs. These provide estimates of gross margins (revenue less cost of purchased power) available to cover payroll, vehicles, depreciation, interest and other expenses, as well as to earn targeted debt service coverage ratios.

Departmental expense budgets should be based on their respective responsibilities for meeting strategic and business plan goals and the most cost-effective ways of meeting them.

The board must ensure that wise trade-offs are made between expense reductions, rate increases and equity accumulation to develop an operational budget that promotes member service reliability, employee productivity and asset efficiency.

MONTHLY REPORTS

Timely preparation of accurate and informative monthly reports becomes a key responsibility of every electric cooperative’s finance staff. Inadequate computer systems, weak internal controls and slow input of operational payroll or materials data can all degrade the quality of management reports.

Coupled with this, failures to maintain complete, accurate accounting systems (separate from those of the cooperative) for significant diversified business ventures can leave management and the board without the information needed to track progress and promptly take corrective actions, if needed.

A cooperative should have documented account closing and reporting procedures (perhaps, a simple checklist). These procedures should provide for timely explanations of operating and capital budget variances, progress toward strategic and business plan goals, and cash flows. Directors should expect informative, up-to-date information to fulfill their responsibilities.

REGULATORY, CONTRACTUAL COMPLIANCE

As public utilities, electric cooperatives may be heavily regulated (at least in some states). Frequently, the finance staff is responsible for assuring compliance with tax requirements, electric service regulations, federal Rural Economic Development Loan & Grant Program rules, loan and lease covenants, RUS purchasing and contracting mandates, and reporting. The board should satisfy itself that management has systems and procedures in place to identify and document each significant performance obligation, that it has assigned responsibility for both performance and reporting, and that it will assure the board of compliance and quick corrective actions if failures occur.

ANNUAL INDEPENDENT AUDIT

Examination of a cooperative's financial statements and footnotes, prepared in accordance with generally accepted accounting principles, and related assessment of the cooperative's internal control systems are critical for the board's oversight role. Getting the independent auditor's work done efficiently and completely remains the responsibility of finance staff.

Finance staff members can contribute to keeping audit costs down and service quality up by:

- Ensuring that internal control processes, code of ethics and compliance assurance systems are working;
- Making needed accounting adjustments during the year rather than waiting until year-end;
- Drafting audit work papers, spreadsheets, memoranda, correspondence and financial statements for the independent auditors; and
- Reviewing prior-year audit adjustments and management report comments for opportunities to improve the audit process.

STAFF PROFESSIONALISM

Management is responsible, with board oversight, for ensuring development of the cooperative's staff and its professionalism. This usually requires encouraging the continuing professional education of staff members, involving them in practical performance improvement processes linked to the compensation system and promoting cross-training or other organizational development initiatives.

BOARD POLICY

Exhibit 7B, "Cooperative Board Policy Template: Finance and Accounting Functions," provides an example of suggested policy coverage, including performance and organizational standards and an annual review and update of the policy.

ADDITIONAL RESOURCES

- *TeachMeFinance.com, http://www.teachmefinance.com*
- *Statements of Financial Accounting Standards, http://www.fasb.org/st/index.shtml*
- *Accounting Dictionary, http://www.ventureline.com/glossary.asp*

KEY CONSIDERATIONS FOR FINANCE STAFF & OPERATIONS

EXHIBIT 7A

ACTION	IMPLEMENTATION SUMMARY	RELATED RECOMMENDATIONS
1 Cooperative long-range financial plans are complete, timely, updated and integrated with budgeting and financial reporting, including: • Documented support for load and energy, tariff, terms of service, staffing and other key input assumptions. • Sufficiently detailed information to create reliable projections and multiple scenarios. • Projection model results that drive improvements in tariff design, budgets, equity management and business planning, as indicated.	A. At least once each year, current load and energy forecasts, construction work plans, strategic and business plans are reviewed and their financial requirements and impacts documented. B. Document and justify other inputs such as equity management and rate competitiveness goals. C. Update the cooperative's financial model often enough to maintain staff competence. D. Review the current financial plan quarterly and update as changing conditions require.	Strategic Planning Cooperative Business Planning
2 Capital budgeting procedures ensure efficient use of the cooperative's debt and equity as well as member service reliability and include: • Current system engineering studies and construction work plans. • Cost-benefit analyses to justify construction project expenditures. • Plant maintenance and renewal programs consistent with service reliability goals.	A. Document procedures for identifying, designing and costing potential construction, repair and renewal projects. B. Analyze cost-benefit relationships of each potential project and prioritize them. C. Subject to member service reliability requirements and financing availability limits, schedule high-priority projects and solicit bids. D. Analyze cost variances of completed projects.	Debt Portfolio Management
3 Operational budgeting procedures promote both member service reliability as well as employee productivity and asset efficiency and include: • Departmental expenditure authorizations that are consistent with the cooperative's strategic and business plans. • Routine comparison of out-sourcing versus internal performance of significant functions. • Budgeted electricity sales that are weather-normalized. • Budget authorization adjustments input as frequently as required by changing conditions.	A. Develop "Most-Likely" and "Sensitivity" (or greatest threat) analyses monthly and total revenue and power cost projections from load and energy sales forecasts. B. Develop departmental expense budgets based on requirements to meet strategic and business plan goals. C. Prepare a "Most-Likely" scenario revenue and expense budget and adjust discretionary expenses if necessary to meet competitiveness or other goals. D. Prepare a "Sensitivity" analyses scenario budget and identify specific discretionary expenses to be cut if necessary.	Strategic Planning Cooperative Business Planning

(CONTINUED)

KEY CONSIDERATIONS FOR FINANCE STAFF & OPERATIONS

EXHIBIT 7A

ACTION	IMPLEMENTATION SUMMARY	RELATED RECOMMENDATIONS
4 Documented account closing and reporting procedures result in timely, accurate monthly financial and operating reports including: • Explanations of both operating and capital budget variances. • Updates regarding progress toward strategic and business plan goals. • A statement of cash flows that connects the income statement and balance sheet.	A. Survey board members and management annually to identify information needs to be met by monthly financial and operating reports. B. Design report package to meet identified information needs, including subsidiary businesses. C. Document closing and preparation process, including the use of estimates as appropriate. D. Improve procedures as needed.	Internal Control Systems
5 Checklists or other tools are used to ensure compliance with significant regulatory and contractual obligations such as: • Federal, state and local tax returns. • Debt and lease covenants. • Electric service and rate regulation. • Collective bargaining agreements. • Rural Economic Development Loan & Grant Program loans and grants.	A. Survey management, general counsel and independent auditors annually to identify significant regulatory and contractual responsibilities. B. Summarize tax and debt performance and reporting requirements, and assign responsibility for their execution. C. Monitor compliance and promptly correct any failures.	Audit Committees
6 The cooperative's annual independent audits are completed quickly and at reasonable cost because: • Cooperative staff prepare audit work papers, closing entries and draft financial statements satisfactory to the independent auditors. • The cooperative's internal control systems prevent or quickly detect accounting errors. • Staff confers with auditors regarding changes to GAAP and GAAS.	A. At mid-year, assess responses to independent auditor management letter and update internal control system documentation, check for compliance, weaknesses and failures and make corrections. B. After reviewing prior-year audit adjustments and work papers and discussions with auditors and general counsel, develop audit preparation work plan for cooperative staff. C. Execute staff audit preparation work plan over a period of months so as to minimize disruption of routine work.	Internal Control Systems Audit Committees

KEY CONSIDERATIONS FOR FINANCE STAFF & OPERATIONS (CONTINUED)

EXHIBIT 7A

ACTION	IMPLEMENTATION SUMMARY	RELATED RECOMMENDATIONS
7 The professionalism of the cooperative's finance and accounting staff is promoted by: • Encouragement of continuing professional education. • Effective performance improvement processes linked to competitive compensation. • Cross-training and other organizational development initiatives.	A. Once each year, survey management to identify finance and accounting functions required by the cooperative and compare them with staff capabilities and time availabilities. B. Assign cooperative staff to high-priority functions, and design personal development programs for each. C. Evaluate each staff member's performance and improvement and compensate accordingly.	Cooperative Business Planning

COOPERATIVE BOARD POLICY TEMPLATE

EXHIBIT 7B

SUBJECT: FINANCE AND ACCOUNTING FUNCTIONS

I. PURPOSE

To set forth this board's policy regarding standards for staffing and performance of key finance and accounting functions.

II. POLICY

Subject to oversight by this board, management is responsible for planning, organizing and executing its finance and accounting functions at levels of expertise and precision required by the cooperative's service responsibilities and stakeholder expectations, though not at costs exceeding related benefits.

III. EXPECTATION

A. Cooperative Accounting Functions Expectations

1. Timely completion, documentation and revision of financial plans to guide development of service tariffs, equity management, business planning and debt portfolio management.
2. Capital budgeting performed so as to ensure efficient use of the cooperative's debt and equity while achieving required service reliability levels.
3. Promotion of member service reliability as well as employee productivity and asset efficiency by means of effective operational budgeting.
4. Creation of timely, accurate monthly financial and operating reports including explanations of budget variances as well as progress toward strategic and business goals.
5. Compliance with significant regulatory and contractual obligations.
6. Prompt completion, at reasonable cost, of the cooperative's annual independent audit.

B. Organization Standards

The professionalism of the cooperative's finance and accounting staff is promoted by:

1. Encouragement of the continuing professional education of staff members.
2. Effective performance improvement processes linked to competitive compensation.
3. Cross-training and other organizational development initiatives.

IV. IMPLEMENTATION AND COMPLIANCE

Implementation: The Board of Directors is responsible for the implementation and review of this policy at least annually. In its review the board will consider recommendations of cooperative management and others, and amend this policy as deemed appropriate.

Compliance: The cooperative's management will be held accountable for the manner in which policy directives are carried out.

This initial policy was established by the Board of Directors at its meeting (date).

APPROVED: ______________________________________

Cash Management Makes the Most of a Cooperative's Money

Electric cooperative cash and investment management practices and policies are driven by multiple interlocking factors:

- Liquidity requirements to meet current and future financial obligations in a timely and cost-efficient manner.
- The number of points through which cash is collected and disbursed.
- Access to lines of credit or other loans to meet short-term funding needs.
- The amount of surplus cash likely on hand at various times throughout the year.
- Investment risk tolerance.

Cash management policies must avoid eroding a cooperative's purchasing power—either to price inflation or loss of investment principal—and protect employees by providing guidance and justification for their actions. Policies for this function should assign responsibility, specify authorized investments, establish controls and specify reporting procedures. Exhibit 8A, "Key Considerations for Cash Management," describes six actions and policy components in this area.

INVESTMENT POLICY STATEMENT

Optimal management of an electric cooperative includes the fiduciary responsibility of selecting appropriate investments for general funds and other liquid assets. Typically, these investments are of low risk and high liquidity to ensure payment of current liabilities as they come due. Management shall prepare and the board of directors/trustees shall approve an investment policy statement (IPS) regarding the cooperative's general funds and other liquid assets.

The IPS shall include:

- **Risk Tolerance:** For electric cooperatives, risk tolerance should be low since these investments are typically needed to pay current liabilities.
- **Time Horizon:** For electric cooperatives, the time horizon should be short (under 12 months) since these investments are typically needed to pay current liabilities.
- **Liquidity:** For electric cooperatives, these investments should be very liquid to be available to pay current liabilities.
- **Laws, Regulation, Unique Circumstances and Taxes:** Identify related issues governing investment activity.
- **Return:** For electric cooperatives, the return on investments should be determined after risk tolerance, time horizon and liquidity have been identified. The return should always be secondary to these constraints.

Short-term investments for general funds and other liquid assets—those with a maturity of nine months or less—could include the CFC Daily Liquidity Fund, CFC Commercial Paper and CFC Select Notes programs. These investments can streamline your accounts payable process by directing investment proceeds to pay monthly bills.

FINANCIAL INSTITUTION RELATIONSHIPS

Typically, in establishing and monitoring relationships with financial institutions, electric cooperatives seek to obtain access to credit as well as investment and other non-credit services, and ensure that those services are cost-effective and meet sufficient quality control standards.

Criteria to consider when selecting a financial institution to perform cash and investment management services include the following:

- Knowledge of and commitment to electric cooperatives,
- Quality and pricing of services,
- Financial strength,
- Ability to provide information and assistance relating to financial services and
- Willingness to provide credit.

Most financial institutions charge fees or require minimum deposit balances for such services.

CASH COLLECTIONS

Matching investment maturities to expected cash needs and outsourcing investment management to a financial institution by having excess funds swept into money market mutual funds or similar deposits are two strategies many cooperatives have adopted.

Getting consumers' payments processed and deposited or invested may be accomplished by collection and deposit preparation in the cooperative's offices, direct collection into a depository lock box, electronic systems (such as wire transfers or Automated Clearing House, or ACH, transactions), self-payment kiosks or via prepaid metering. Each of these options carries pros and cons that should be assessed. In-house processing, for example, ensures control and consumer service quality but lacks the check collection speed of a lock box system.

Routinely transferring surplus funds (excess above short-term cash needs) from local depositories to a single financial institution for investment can simplify cash management, reduce underutilized bank balances and raise overall investment yields.

FORECASTING CASH FLOWS, BALANCES

Electric cooperatives should have a documented system for forecasting cash receipts from consumers and disbursements to power suppliers, lenders, employees, contractors and others. Although rarely precise, these forecasts can allow a cooperative to make the best use of temporary fund surpluses or identify borrowing needs. Daily transaction and balance amounts should be estimated weekly for two months into the future as well as monthly for the next year. It's a good idea for cooperatives to compare actual with forecasted amounts, investigate significant variances and continually improve their forecasting models.

INVESTMENT PORTFOLIO MANAGEMENT

Cooperative management decides how to staff the cash and investment management function, including selecting the best combination of in-house cash processing and investing, financial institution lock boxes, outside investment portfolio management firms or ways of achieving the board's policy objectives.

Once the function is organized, the services of an accredited bank may be needed; these are usually limited to those with at least $100 million in capital and surplus. The board should expect simple monthly reports of the cooperative's investment portfolio showing the type of securities used, as well as monthly and year-to-date earnings updates. Investment amounts should not exceed Federal Deposit Insurance Corporation limits.

BOARD POLICY

Exhibit 8B, "Cooperative Board Policy Template: Cash and Investment Management Policy," demonstrates an approach to adopting best practices while leaving implementation specifics to management.

ADDITIONAL RESOURCES

- *"Essentials of Cash Management," Association of Financial Professionals.*

KEY CONSIDERATIONS FOR CASH MANAGEMENT

EXHIBIT 8A

ACTION	IMPLEMENTATION SUMMARY	RELATED RECOMMENDATIONS
1 The cooperative establishes and monitors relationships with its financial institutions to obtain access to credit and other services cost-effectively, including the following considerations: • Knowledge of and commitment to electric cooperatives, availability of consulting services and financial strength. • Cost-effective credit, cash and investment management services.	A. Define the cooperative's financial institution needs including access to debt financing, cash management, consulting and other services. B. Identify a manageable number of financial institution candidates and rank them according to their ability to meet cooperative needs. C. Establish and monitor financial institution relationships for quality of service and cost-effectiveness.	Debt Portfolio Management
2 The pros and cons of cash collection and concentration methods are routinely assessed by: • Weighing in-house quality control versus float reduction. • Analyzing concentration transfer costs versus increased interest earnings.	A. Compare the cooperative's cash collection and concentration practices with similar electric cooperatives and other local businesses. B. Consider available financial institution services. C. Select the best combination of practices for the cooperative's needs.	
3 A documented system of forecasting cash flows and balances allows the cooperative to foresee borrowing needs and investment opportunities and is maintained by: • Forecasting daily transactions and balances for the next two months and monthly for the next year. • Investigating significant variances and improving the forecast model.	A. Analyze the precise causes and timing of cooperative cash inflows and outflows and examine historical relationships with energy sales and seasonal construction. B. Using cooperative-developed or off-the-shelf software, create the most precise forecast model practicable. C. Investigate forecast vs. actual differences and continuously perfect the model.	Strategic Planning and Cooperative Business Planning

KEY CONSIDERATIONS FOR CASH MANAGEMENT (CONTINUED)

EXHIBIT 8A

ACTION	IMPLEMENTATION SUMMARY	RELATED RECOMMENDATIONS
4 The cooperative selects only those investments highly assured of recovery of asset principal plus a yield by meeting standards of: • Credit quality (only highly rated or government-guaranteed debt). • Market liquidity (only those investments that can be conveniently converted back to cash). • Maturity (contractual repayment when needed).	A. Specify needs for minimum ratings, liquidity (hours to cash conversion) and ability to tailor maturities to requirements. B. Identify investment alternatives and document their respective mechanical, credit quality, liquidity and maturity characteristics. C. Select only investments meeting cooperative criteria.	
5 Cooperative management creates and the Board of Directors approves an Investment Policy Statement (IPS). The IPS must be detailed enough for any investment firm to understand the cooperative's objectives. For general funds and other liquid assets, the IPS should include: • Risk tolerance • Time horizon • Liquidity • Laws and regulations • Investment strategy to meet stated objectives. NOTE: The expected rate of return can be easily identified once the above items are defined.	A. Adopt a board policy explicitly stating the cooperative's capital preservation and liquidity investment objectives. Any outside firm selected to handle these matters should strive to match the cooperative's IPS. B. Routinely re-examine the cooperative's approach to in-house versus outsourced management and hedging, and adjust as necessary.	
6 The cooperative's cash and investment management function is staffed and controlled by a carefully considered combination of: • In-house processing, financial institution lock boxes and outside investment portfolio management services. • Monthly reporting showing the elements of the cooperative's investment portfolio as well as monthly and year-to-date earnings.	A. Cash and investment management functions (e.g., receipts processing, concentration, flow and balance forecasting, investment selection, etc.) and capability requirements are specified. B. Management structures the cooperative's cash and investment management function and reports results monthly.	Cooperative Business Planning

COOPERATIVE BOARD POLICY TEMPLATE

EXHIBIT 8B

SUBJECT: CASH AND INVESTMENT MANAGEMENT POLICY

I. PURPOSE

To set forth the cooperative's policy regarding management of cash and temporary investments and to provide guidance to management for the purposes of preserving liquid asset purchasing power and realizing investment income consistent with minimal risk.

II. POLICY

It is the policy of the board that all cooperative funds deposited in financial institutions are secured and that all cooperative funds are properly managed and accounted for. Consistent with its oversight responsibilities, the board in this policy sets guidelines and expectations that management should require of staff in their respective financial management roles.

III. EXPECTATION

A. Financial Institution Relationships and Requirements

The cooperative selects its financial institutions based on their knowledge regarding, and commitment to, electric cooperatives, quality and pricing of services, financial strength, ability to provide consulting services to the cooperative and willingness to provide credit when needed. The cost and quality of services provided by financial institutions selected by the cooperative will be evaluated periodically.

B. Cash Collections and Concentration

Alternative approaches to processing consumer payments and other cash receipts and concentrating them for efficient administration and investment are periodically examined, and the most advantageous arrangements implemented.

C. Forecasting Cash Flows and Balances

The cooperative's system for forecasting cash flows and balances will be carefully documented and routinely provide estimates of daily amounts for the near-term (as defined by management) and monthly amounts farther into the future. Significant actual-forecast variances are promptly investigated and forecast models adjusted to improve accuracy.

D. Authorized Investments

Funds of the cooperative may be invested in securities bearing ratings of at least A1, P1 and F1 without prior board approval. Prior board approval is required for investments with lower or no ratings exceeding the lesser of $__________ or 1 percent of balance sheet equity in the aggregate.

E. Investment Objectives and Strategy

General objectives of managing the cooperative's cash and investments include preservation of principal and assurance of liquidity. Management is responsible for implementing investment strategies consistent with those objectives and periodically reporting to the board regarding alternative arrangements being examined.

F. Investment Portfolio Management

Management is responsible for organizing the cash and investment management function with some combination of internal and external resources, selecting safe-keeping banks (if needed, and subject to a minimum $100 million capital and surplus requirement) and reporting to the board routinely regarding investment amounts, dispositions and earnings.

IV. IMPLEMENTATION AND COMPLIANCE

Implementation: The CEO/general manager, along with the CFO, is responsible for the implementation of this policy. The CEO/general manager will be held accountable by the Board of Directors for adhering to this policy.

Compliance: The Board of Directors will ensure that this policy is adequate to minimize risk to all cooperative funds and that all such funds are properly managed and accounted for. The board shall review this policy at least annually. In doing so, the board will solicit input and recommendations from the CEO/general manager, CFO and the cooperative's auditor.

The initial policy was established by the Board of Directors at its meeting (date).

APPROVED: ____

How (and Why) Cooperatives Should Manage Their Debt Portfolios

Providing electric utility service remains very capital-intensive. An appropriate mix of debt and equity financing lowers financing costs and yields lower rates to consumer-members. The cost of debt financing can be reduced over time by judicious selection of interest rate modes (fixed, variable or combinations), debt structure and amortization. Equity should be a significant portion of the capital structure for long-lived assets and should provide the majority of capital for new, diversified businesses.

While there are no absolute rules for developing a debt portfolio management policy, the following rough guidelines may be helpful:

> **A Conservative Portfolio Structure**
> If a cooperative has a low risk tolerance (because its margins are too small to tolerate wide swings in interest rates, staff does not have time to consistently monitor rate trends or because of the general philosophy of management and directors) it should take a more conservative approach to debt portfolio management. If staff and board members are uncomfortable with interest rate risk, limit variable-rate debt to less than 25 percent of the portfolio, fix rates of at least 50 percent of debt to its maturity, and "ladder" the remaining portion so that a significant portion of the debt does not reprice in the same year.
>
> **Choosing a Moderately Risky Debt Approach**
> A mix of 30 percent to 50 percent variable-rate debt (managed so as to convert portions to fixed rates on market rate dips) with rates of the remainder fixed for various terms across the yield curve may be appropriate. Cooperatives choosing this strategy will generally have sufficient margins to cushion adverse interest rate increases. They also need skilled staff with enough time and expertise to actively manage the debt portfolio, and, in general, directors and management with a higher risk tolerance.
>
> **Aggressive Debt Portfolio Management**
> A management team that values lower interest costs more than predictable cash flows may choose to put 50 percent to 75 percent of its portfolio in variable rates. In this case, staff should monitor markets closely for opportunities to lock in low long-term rates.

No less than once each year, a cooperative's board should consider recommendations regarding risk tolerance, potential benefits of alternative debt portfolio approaches and other matters that have an impact on debt portfolio selection.

Exhibit 9A, "How to Promote Debt Portfolio Management," describes six actions essential to effective debt management. Summarized implementation steps are also presented for each proposed practice.

MONITORING CREDIT MARKETS AND RATE DRIVERS

Debt portfolio management involves choices among fixed and variable interest rate modes, equity and debt financing combinations, principal amortization methods (level principal, level debt service, bullet or balloon), prepayment and rate conversion features. Ensuring that a cooperative stands positioned to take advantage of credit markets requires staff that understand global and local forces influencing the capital markets.

As part of overall debt portfolio management, cooperative staff should be charged with preparing concise credit market and interest rate forecast news updates for the board and management, and eliciting board guidance on interest rate risk tolerance.

FORECASTING CAPITAL NEEDS

An electric cooperative's financial planning process should include estimates of future capital funding needs, including utility plant additions, diversified business ventures, service territory acquisitions, power supply, or community and economic development. Capital requirements may be met by equity collected from consumers, borrowing, leasing or combinations of all these methods. One objective of debt portfolio management involves achieving the best combination of debt and equity to minimize total costs to consumers.

A cooperative should prepare a financial forecast at least once each year, and more often as conditions change. The analysis should include consideration of all potential capital needs and the most beneficial combination of debt and internally generated funds used. Board reviews of the cooperative's financial forecast and plans on a recurring, but at least once-per-year basis, will help ensure they are kept current.

UNDERSTANDING DEBT FINANCING AVAILABILITIES

Electric cooperatives have only a few consistently reliable sources of debt financing. Fortunately, these sources tend to offer financing at lower costs than those available to most investor-owned utilities. Staying current regarding expected loan conditions, interest rate mode and principal amortization alternatives, covenant restrictions and other debt characteristics is less complex for cooperatives than for their competitors. Knowledge of financing alternatives helps in accessing the financing source most beneficial for a cooperative's present or future requirements.

OPERATIONS MODELING

All businesses need pro forma financial information—especially electric cooperatives that require long lead times for construction, rate-setting and organizational changes. Most cooperatives have substantial experience forecasting load and energy demand, revenue, expenses and related balance sheet items. Debt portfolio management requires even more sophisticated analyses of financial results under alternative interest rate scenarios and principal amortization assumptions. Software packages available from CFC and other sources can make those exercises much easier and should be used as often as necessary to keep directors informed and maintain staff expertise.

Selection of the right software package begins with specification of requirements, especially the information content sought from computer-generated reports. The debt management information requirements include how cash flow, TIER (times interest earned ratio) and debt service coverage will have an impact on alternative portfolios under various future conditions. Once a modeling package has been selected and installed, cooperative staff must be trained in its use and maintenance. That maintenance involves keeping the data current.

PRUDENT USE OF VARIABLE-RATE DEBT

Predicting of interest rates can be difficult even on a short planning horizon. Accordingly, a cooperative should take interest rate risks only if the following conditions can be met:

- It can tolerate interest cost fluctuations that may occur before it converts to fixed rates;
- It conducts sensitivity analyses to determine the potential impact of interest rate volatility based on some assumptions about rate movement; and
- Staff can devote the time to remain aware of shifts in the credit markets and how to protect against adverse moves.

Variable rates may be a wise choice when advancing or repricing loans in an unfavorable market, for they can eventually serve as a bridge to lower fixed rates. Keeping some portion of a cooperative's debt in variable rates can be an effective strategy if staff understand the risks.

Execution of a prudent variable-rate debt strategy involves:

- Estimating a cooperative's dollar exposure to rate changes (using the forecasting model discussed above);
- Establishing board-approved trigger points for converting to or from fixed interest rates; and
- Ensuring that assigned staff have sufficient training, knowledge of vital tools, information access and directions to balance risks and rewards.

EVALUATION OF FIXED-RATE CONVERSIONS

A cooperative may be able to lower overall financing costs by converting from variable- to fixed-rate debt and locking in fixed rates when rates in general are moving higher. The cooperative may sometimes achieve savings by paying a conversion fee on higher-rate debt and locking in lower rates.

The primary objectives of debt portfolio management are managing costs over time, access to capital and understanding constraints placed on the cooperative's operation by lenders. Staff should periodically analyze differences between rates on existing debt and other alternatives.

In addition to interest rates, staff should consider upfront fees for loans, documentation costs, prepayment fees, continuing access to capital, relationship with lenders, and terms and conditions of lending. Cooperative board policy should provide policy guidance.

BOARD POLICY

Exhibit 9B, "Cooperative Board Policy Template: Debt Portfolio Management," offers an example of a board policy for directing implementation of best practices for debt portfolio management.

ADDITIONAL RESOURCES

- *The Beige Book, Federal Reserve Board, http://www.federalreserve.gov*
- *CFC regional vice presidents are always happy to sit down with cooperative management and directors to undertake a thorough interest rate analysis of the system's debt portfolio and determine if cost savings can be achieved.*

HOW TO PROMOTE DEBT PORTFOLIO MANAGEMENT

EXHIBIT 9A

ACTION	IMPLEMENTATION SUMMARY	RELATED RECOMMENDATIONS
1 Gain an understanding of economic, international, geopolitical or other factors likely to move interest rates or influence availability of debt financing by: • Identifying relevant interest rate and credit market drivers. • Documenting current and predicted credit market conditions. • Reviewing capital markets' outlook and the cooperative's debt portfolio at each board meeting.	A. Ascertain that credit market monitoring and debt portfolio management responsibilities are specifically assigned. B. Document findings. C. Require reporting to the board.	Board Responsibilities and Competencies
2 Periodically update forecasts about the cooperative's equity and debt capital requirements for: • Electric utility plant construction work plans. • Startup or expansion of diversified businesses. • Community and economic development. • Participation in power supply and transmission projects. • Service territory acquisition opportunities.	A. Maintain a current list of potential debt and equity capital requirements. B. Tentatively allocate requirements between equity and debt.	
3 Stay up-to-date on knowledge about debt financing available from CFC, RUS and other sources, as well as the respective characteristics, including: • Indicative interest rate levels and alternative setting modes. • Security and covenant requirements. • Loan application documentation and time requirements. • Principal amortization alternatives. • Prepayment conditions and costs. • Documentation costs. • Pre- and post-loan charges and fees.	A. Maintain current files of materials describing financing available from various sources. B. Provide summary reports to senior management. C. Invite your CFC RVP to board meetings periodically to offer updates on the current interest rate environment.	Cooperative Business Planning

(CONTINUED)

HOW TO PROMOTE DEBT PORTFOLIO MANAGEMENT

EXHIBIT 9A

ACTION	IMPLEMENTATION SUMMARY	RELATED RECOMMENDATIONS
4 Maintain abilities to model expected cooperative operations and provide management information, such as: • Projected financial statements under alternative scenarios. • Startup cash requirements of diversification businesses. • Ability of tariff designs to yield adequate revenue. • Financial covenant ratios (TIER and DSC) to be achieved under various conditions. • Revenue requirements during rising interest rate periods.	A. Select a software package appropriate for the cooperative's needs. B. Assign and train staff to efficiently operate the model. C. Keep the model up-to-date.	
5 Under appropriate conditions, take advantage of variable-rate debt savings and manage related risks by: • Reviewing interest rate risk in the debt portfolio. • Pre-establishing interest rate levels at which to convert to fixed. • Using available tools. • Identifying and monitoring potential causes of rate increases. • Authorizing, in advance, rate fixes at trigger points. • Exploring hedging alternatives to fixing interest rates.	A. Assign and train staff to manage variable-rate debt and risks. B. Require reporting to the board regarding proposed conversion and trigger points. C. Reauthorize as needed.	
6 Routinely evaluate opportunities to convert existing debt to lower fixed or variable rates by: • Determining annual financing goals. • Monitoring the spread between existing and alternative rates. • Regularly calculating the cost of converting to variable or fixed. • Estimating conversion cost recovery periods. • Authorizing, in advance, recovery period conversion points.	A. Set financing cost targets as part of annual planning. B. Review conversion costs and recovery periods with senior management. C. Report to the board and seek reauthorizations.	Cooperative Business Planning

COOPERATIVE BOARD POLICY TEMPLATE

EXHIBIT 9B

SUBJECT: DEBT PORTFOLIO MANAGEMENT

I. PURPOSE

To set forth policy relating to management of the cooperative's debt portfolio to minimize the costs of its capital while ensuring access to debt financing.

II. POLICY

It is the policy of the Board of Directors to guide active management of choices among equity, debt and other forms of financing and careful selection of the interest rate modes, principal amortization and other features of its debt portfolio.

III. EXPECTATION

A. Foundations of the Cooperative's Debt Portfolio Management

The cooperative's management of its debt portfolio shall be based upon careful consideration of its:

1. Present debt portfolio structure including mix of variable- and fixed-rate interest modes, interest rate adjustment periods, covenant requirements and other features.
2. Forecasted future needs for capital, including both debt and equity for utility plant, diversified business ventures, community and economic development and such other uses as the board may recognize from time to time.
3. Current and prospective business conditions that may have an impact on the availability and cost of alternative forms of financing.
4. Diligent analysis of risks and rewards of allowing debt interest rates to vary or be fixed.

B. Policy Implementation Guidance

The cooperative shall develop and implement debt portfolio management, generally, as follows.

1. Staff will be assigned to maintain understanding of capital markets and interest rate trends, regularly update forecasts of the cooperative's capital needs, operate financial models and keep documentation of alternative debt sources current.
2. The cooperative's debt portfolio will be carefully monitored to identify and execute savings opportunities from conversions between interest rate modes.

IV. IMPLEMENTATION AND COMPLIANCE

Implementation: The Board of Directors will provide overall guidance regarding the cooperative's financing goals, risk tolerance, rate conversion trigger points and cost-recovery period governance by approving the implementation of this policy and undertaking an annual review of the policy to determine if there is a need for any changes.

Compliance: The CEO/general manager shall be held accountable for the achievement of the cooperative's debt management and availability objectives and will routinely report to the Board of Directors regarding progress toward objectives as well as opportunities to improve the cooperative's plans and this policy.

This initial policy was established by the Board of Directors at its meeting (date).

APPROVED: ____________________________________

Equity Management—Achieving a Balance

To run a financially sound cooperative in a prudent manner, access to credit (providing funds when debt capital needs emerge) must be available. While many factors enter into the ratings of credit risk and debt quality, the most common involves interest coverage, or TIER (times interest earned ratio). By combining the criteria for patronage capital with reasonable coverage criteria on interest, a valid indicator of a cooperative's financial health can be produced at minimal cost.

When it comes to managing a cooperative's equity, concepts and models are a critical tool in developing and implementing policies that are consistent with sound business practices and planning. Modeling enables a cooperative to test and set objectives at a level that supports the optimum mix of debt and equity to minimize a cooperative's rate-of-return requirements and meet its debt coverage obligations. In addition, strong equity management practices enable retiring capital credits to members—a tangible evidence of cooperative ownership.

An electric cooperative functions in a dynamic environment. Needs of consumer-members, along with the strategic goals, should be continually re-evaluated and balanced. Each cooperative's Board of Directors, management and staff have an obligation to move the cooperative in the direction that best positions it for the future. While the future can't be precisely predicted, the financially strong cooperative is more likely to meet its service pledge.

Exhibit 10A, "How to Promote Equity Management," presents five actions each electric cooperative should consider to ensure that it works toward low capital costs.

DEBT/EQUITY RATIO TARGETING

The optimum equity level for an electric cooperative will allow it to provide service at the lowest possible cost in the long run, while maintaining its ability to obtain additional debt capital and return capital contributed by members on a meaningful cycle.

A high debt/equity ratio may be seen as a risk by lenders, causing them to deny additional debt financing, even in times of crisis or emergency. Conversely, a low debt/equity ratio may indicate that older cooperative consumer-members, whose patronage has not been retired, are financing a disproportionately high part of the costs of serving new consumers. Since no two cooperatives are alike, each system must consider and identify its debt/equity target range based on its own unique circumstances.

The process of targeting the right debt/equity ratio begins with a well-supported forecast of expected balance sheet growth and the amount of debt that can be serviced over the forecast period. After thinking through legal, member relations, accounting and other issues, a target patronage capital rotation method and cycle should next be selected. Finally, combinations of growth and earnings coverage scenarios should be modeled in conjunction with legal and similar considerations to arrive at a narrow range of targeted debt/equity ratios.

Keep in mind that no single debt/equity ratio is right for a given cooperative. A debt/equity ratio of 80:20 is probably too high for most electric cooperatives because it likely limits their ability to borrow more at competitive interest rates in an emergency; conversely, 20:80 may be too low because it limits returns of patronage capital to members or increases the cooperative's takeover risks. The average for all electric cooperatives is around 55:45.

LEGAL AND REGULATORY ISSUES

Federal and state income tax regulations, laws regarding members' vested rights and state escheat practices may all affect a cooperative's equity management plan. For example, care should be taken to ensure that a cooperative's accounts reflect separately the amount of patronage-sourced and non-patronage-sourced income. That segregation could become significant if its tax-exempt status is lost, as only the amount of the allocations attributable to operating margins would be deductible in computing a cooperative's taxable income.

A cooperative's legal counsel and tax advisers should be directed to report periodically regarding changes in laws and regulations that might require revisions in the cooperative's equity management plans.

MEMBER RELATIONS

If a cooperative decides to pay capital credits, it should consider how to distribute payments to best build member loyalty. One key to that success involves educating the membership that patronage capital retirements are a return from the cooperative, not an overcharge refund.

Distribution systems should develop planned capital credits allocation and retirement programs that treat all members equitably. Those plans should be structured to benefit the maximum number of members while maintaining the financial security of the cooperative. The rotation of capital should be based on the circumstances of the organization as they relate to existing equity levels, growth rates and need for the development of margins to meet the needs of the rate-of-return concept. The most common formulas for deciding capital credits retirement are the first-in, first-out method; a percentage of prior year's net margins or of total margins; last-in, first-out; or some hybrid.

It's a good idea to integrate equity management planning into a cooperative's strategic and business plans (especially rate competitiveness and development of consumer goodwill). Then, the best combination of allocation basis (e.g., energy purchases or proportionate revenue), retirement method, rotation cycle and timing can be selected.

SPECIAL PATRONAGE CAPITAL RETIREMENTS

Special retirements are those handled in some fashion other than the cooperative's regular allocation and rotation procedures. Examples include payments to estates of deceased patrons and members at a specified age. In addition to the member-relations benefits, special retirements can help simplify recordkeeping. Such retirements may be at face value or discounted. Since accounting requirements related to the treatment of patronage capital retirements are evolving, cooperative staff must stay up-to-date on this subject.

PLAN DOCUMENTATION

To tie all these considerations and analyses together, a cooperative should document its equity management plan, perhaps as an element of its more comprehensive business plan. The equity management plan will specify targeted TIER and equity levels based on a blended cost of debt, expected growth rate and the capital credits revolving cycle.

The equity management plan, reflecting expected cooperative growth, earnings coverage and patronage capital rotation should be part of its periodic financial modeling.

BOARD POLICY

An example of a board policy directing the establishment and updating of an equity management plan is shown in Exhibit 10B, "Cooperative Board Policy Template: Equity Management." It sets forth the cooperative's objectives and rationale for equity management, including both debt/equity financing considerations, as well as the impacts of legal and member relations considerations.

ADDITIONAL RESOURCES

- *NRECA/CFC Capital Credits Study Committee Final Report and Recommendations, 1976; CFC/NRECA Capital Credits Task Force Report, 2005.*
- *CFC Equity Management Modeling Computer Software.*
- *Internal Revenue Service—General Survey of 501(c)(12) Cooperatives and Examination of Current Issues, http://www.irs.gov/pub/irs-tege/topice02.pdf.*

HOW TO PROMOTE EQUITY MANAGEMENT

EXHIBIT 10A

ACTION	IMPLEMENTATION SUMMARY	RELATED RECOMMENDATIONS
1 The cooperative's financial planning carefully targets a debt/equity range after consideration of: • Relative advantages and disadvantages of debt and equity given the cooperative's need for future financing, cost-of-capital reduction goals and takeover threats. • Return-on-equity required, given the cooperative's expected growth rate and its patronage capital rotation cycle.	A. Forecast the cooperative's balance sheet growth over 10 years. B. Estimate the maximum amount of debt the cooperative can carry, given earnings coverage requirements and expected lender conditions. C. After consideration of member relations issues and return-on-equity requirements, adopt a target patronage capital rotation cycle. D. Model cooperative operations and financial results to select an appropriate debt/equity range.	Debt Portfolio Management
2 Legal issues relevant to equity management are periodically considered, including: • Governing bylaws of the cooperative. • Federal and state income tax regulations. • State escheats regulations. • Laws regarding patrons' vested rights.	A. Direct cooperative tax advisers to survey state and federal tax developments related to equity management. B. Direct cooperative legal counsel to periodically report changes in pertinent laws or regulations. C. Change the cooperative's policy if appropriate.	
3 Member relations aspects of equity management are periodically evaluated, such as: • Timing capital credits retirements to coincide with holiday shopping seasons or the cooperative's annual meeting. • Retirement publicity opportunities. • Cooperative rates relative to competitors. • Alternative allocation and retirement methodologies.	A. Consider the potential roles of equity management related to the cooperative's strategic and business plan objectives. B. Evaluate the cooperative's tariff structure and competitiveness. C. Integrate equity management issues with other financial policies.	Strategic Planning Business Planning

(CONTINUED)

HOW TO PROMOTE EQUITY MANAGEMENT

EXHIBIT 10A

ACTION	IMPLEMENTATION SUMMARY	RELATED RECOMMENDATIONS
4 Cooperative practices regarding special patronage capital retirements to members' estates and bankrupt businesses are periodically reassessed by: • Reviewing the cooperative's responsibilities under state and other laws. • Considering the impact of generally accepted accounting principles on the cooperative's reported balance sheet equity. • Comparing the cooperative's bylaws to similarly situated cooperatives.	A. Annually, consider the number and dollar amount of claims made by decedents' estates and bankrupt businesses on cooperative patronage capital. B. Document the cooperative's current responsibilities to these member classes. C. Document current accounting requirements for patronage capital. D. Adjust the cooperative's bylaws and/or policy as needed.	
5 The cooperative develops and maintains an equity management plan that documents: • Target debt/equity ranges. • Estimated growth, rotation and other parameters. • Revenue requirements. • Tax, member relations, accounting and other underlying assumptions.	A. As part of the planning routine, update the cooperative's financial projection model to reflect changes in equity management requirements and planning assumptions. B. Document the effects of taxes, member relations, accounting and other developments on the model's inputs and interpretation of its outputs. C. Ensure the equity management plan integrates with more general business plans.	

COOPERATIVE BOARD POLICY TEMPLATE

EXHIBIT 10B

SUBJECT: EQUITY MANAGEMENT

I. PURPOSE

To set forth policy relating to management of the cooperative's equity, including its role in the long-term financing of facilities as well as periodic rotation of patronage capital returns.

II. POLICY

It is the policy of the board to ensure prudent oversight and management of the cooperative's equity requirements and needs. In doing so, the board will require the development of an equity management plan to ensure that the cooperative attains and maintains an adequate, reasonable and fair equity level to meet the cooperative's relevant financing, economic, strategic, regulatory and other needs and requirements as outlined herein.

III. EXPECTATION

A. Equity Management Considerations

1. The cooperative's growth prospects and need for utility plant financing and its expected debt service earnings coverage capacity.
2. The cooperative's rate competitiveness, including factors such as the need to accumulate equity or reduce consumers' effective costs by returning their patronage capital.
3. Legal, tax and regulatory requirements and accounting principles.

B. Approval of Equity Management Plan

As directed by the board, cooperative management will prepare or update its equity management plan, including the following elements:

1. A range of forecasted growth rates in total capitalization of the cooperative, based on expected membership levels and electricity sales.
2. Estimated debt financing requirements and their blended costs.
3. Goals for debt service coverage and debt/equity ratio over the forecast period.
4. A capital credits rotation cycle.
5. Balance sheet equity goals.

IV. IMPLEMENTATION AND COMPLIANCE

Implementation Responsibility: Management will be held accountable for implementation and achievement of the cooperative's equity management plan approved by the Board of Directors, and will routinely report on progress toward the plan's stated objectives, as well as opportunities to improve the cooperative's plans and this policy.

Compliance Responsibility: The Board of Directors will annually review this policy to ensure that it is relevant to the cooperative's current financial posture, and that the policy and related plan meet compliance requirements for operating as a not-for-profit organization. During the policy review the Board of Directors will invite input from management and others knowledgeable about equity needs, requirements and expectations for operating as a not-for-profit entity.

The initial policy was established by the Board of Directors at its meeting (date).

APPROVED: ______________________________________

Section C GOVERNING FOR RISKS AND CHANGE

OVERVIEW

CHAPTER 11: BUSINESS RECOVERY PLANNING: BEING PREPARED FOR 'WHAT IF'
A cooperative provides critical services to its consumer-members and is obligated to maintain reliable performance even if damaged by storms, fires, terrorist attacks or other disasters. Maintaining an effective business recovery plan becomes a very important financial best practice.

CHAPTER 12: A BOARD'S OVERSIGHT ROLE AS FIDUCIARY AND REGULATOR
In addition to carrying out their duty of care as fiduciaries, as of 2018 electric cooperative boards in 33 states are substituting as a state utility regulatory body by approving rates and service policies (regulations).

CHAPTER 13: AUDIT COMMITTEE FUNCTIONS ARE INVALUABLE
Independent audit examination and reporting remains a valuable board of directors oversight function.

CHAPTER 14: INTERNAL CONTROL SYSTEMS PROVIDE ADDED ASSURANCES
Internal control systems provide added assurance for minimizing the cooperative's exposure to fraud, criminal conduct and bad financial resource management.

CHAPTER 15: CONTROLS FOR MINIMIZING EXTERNAL RISK EXPOSURE
"Cyber security is one of the most important policy and technology topics an organization must address. Critical infrastructure for energy and utilities is vital to personal safety, economic growth and national defense."
— IBM White Paper, IBM Corporation, August 2012

CHAPTER 16: ADJUSTING ELECTRIC RATES FOR AN EVOLVING UTILITY LANDSCAPE
Setting electric rates is one of the most important responsibilities of any electric cooperative board of directors/trustees. Rates need to not only cover both operating and capital costs, but also send critical pricing messages to members regarding the value of electricity.

"Governance is your prudent decision-making process"

—LeaderMetrics© 3ethos, Mystic, CT

"Effective risk oversight has many components. It requires boards to understand risks and how they interrelate, understand potential impacts, and to always be watching for current and future changes that necessitate some risk-management system recalibrations."

—"The 'New' Imperative for Boards: Risk Oversight," NRECA Legal Reporting Service, Volume 46, Number 6, June 2010

Business Recovery Planning: Being Prepared for 'What If?'

Through hurricanes, ice storms, floods and numerous other catastrophes, electric cooperatives have developed a proven record of quickly and effectively restoring power to their consumers. However, equally important in disaster recovery are a cooperative's internal business operations—making sure billing, data processing, employee payroll and other business support functions spring back into service as quickly as possible.

Being prepared to get the cooperative up and running in the face of catastrophe is essential to the long-term health and, ultimately, existence of an electric cooperative. Also, business recovery planning should be considered part of the commitment to become the members' "most trusted electricity provider."

The process of developing, implementing and maintaining a satisfactory disaster recovery plan should be tailored to each cooperative's risks and staff availability. Even small organizations can, and should, protect themselves by applying the principles explained in this chapter. For example, a cooperative can help ensure continuity of its internal business operations by:

- Identifying critical processes—billing and collections, payroll, service restoration and supplier payments—that must be resumed following a fire or storm damage to its headquarters.
- Arranging for safe storage of duplicate records and computer media for those processes, as well as for temporary operations at another site.
- Staging, at least once a year, a disaster recovery exercise to ensure that procedures are being followed to keep business recovery plans effective.

Each cooperative must determine what business recovery plan best serves its purposes and protects critical operations. Exhibit 11A, "How to Implement a Business Recovery Plan," describes five actions of implementing and maintaining a disaster recovery plan—from the original commitment to adapting to ongoing organizational changes.

SUPPORT FROM THE TOP

As with every other major cooperative undertaking, development of a business recovery plan starts with clear and complete support from the top—the CEO/general manager and Board of Directors—since creation will require a serious commitment of time, staff and financial resources.

To guide development, two critical appointments—a Disaster Recovery Project Manager and a Disaster Recovery Task Team—are essential starting points.

- The **Disaster Recovery Project Manager** must coordinate a large list of tasks that cross organizational lines to advance the project over a variety of institutional hurdles. Disaster recovery is usually a large-scale undertaking involving many—and probably all—departments within a cooperative.
- The **Disaster Recovery Task Team** should consist of representatives from all of the cooperative's business and operations units backed by support from each unit's leader. The team members' jobs are to make sure their departments' requirements are reflected in the recovery plan and to communicate the team's conclusions back to each business unit, building organization-wide support for the final product.

DETERMINING OBJECTIVES AND IDENTIFYING RESOURCES

Once the Disaster Recovery Project Manager and Disaster Recovery Task Team are in place, discussion should focus on what threats the cooperative may face, what systems or resources might be lost, restoration goals and a plan of action for recovery. The end result should see the electric cooperative in a constant state of readiness to run the business without normally relied-upon infrastructure or personnel and be able to reduce serious disaster-related financial losses.

Developing the plan demands clearly defined recovery objectives, led by:

- The Recovery Point Objective, or RPO—The maximum allowable data loss for a critical business function. To determine this, ask how many days, hours or minutes of transaction records and other data can the cooperative afford to lose.
- The Recovery Time Objective, or RTO—The maximum allowable time a critical business function can be unavailable. How long can the cooperative go without that function?

THREE STEPS TO A PLAN

Setting business recovery plan objectives and identifying resources should proceed in three stages: analyze the threats, prioritize business functions and develop recovery plans.

The first step should be to perform a threat analysis, anticipating the types of disasters that could strike the cooperative and, if they do strike, their likely impact. Usually, the first considerations are with physical assets: buildings, equipment, vehicles and materials. Human capital—loss of life—also will need to be considered.

The Disaster Recovery Task Team should review what could happen to disable these assets, and which occurrences are most likely. If the list of potential disasters is extensive, it may be advisable to determine the cooperative's sensitivity scenario, or greatest threat, at the beginning of this process, then develop recovery plans that work toward overcoming that scenario.

Next, the Disaster Recovery Task Team should identify the cooperative's critical business functions and resources necessary to conduct them, and rank them by order of importance. Priorities should be set by quantifying losses in terms of dollars, time, service, credibility or opportunities lost due to extended down time in each functional area.

An assessment, through a Business Impact Analysis, of these potential losses helps establish RPOs and RTOs for each business unit and directs attention to those with the most loss. Using the assessments, the Disaster Recovery Task Team can begin fashioning plans for restoring these processes when/if the cooperative's buildings, personnel or key systems are unavailable.

STRATEGY SURVEY AND SELECTION

The Disaster Recovery Task Team must work through several research steps before moving to the development of the actual plan. These steps include:

- Identifying critical business processes and applications across the organization;
- Identifying all the steps necessary to fulfill these processes; and
- Identifying resources, individuals and other requirements for fulfilling the processes.

In conducting this research, the team should keep an eye peeled for ways various business units support essential tasks and make provisions for group interdependencies in the final plan.

Determining how each unit accomplishes its mission—the steps taken and resources and individuals essential to completion—becomes a keystone of any sound recovery plan. By examining business processes in this manner, a cooperative positions itself to make decisions about how to complete essential tasks when its headquarters, systems and staff are compromised by a disaster.

Keep in mind that electric cooperatives able to document normal procedures across all departments are much more likely to build successful recovery plans. While the initial research phase can entail a long and painstaking process, it yields a bonus by revealing opportunities for improving normal daily work flows.

FUNCTIONAL AND SITUATIONAL TESTING

Every business recovery plan must be tested in a simulated disaster, drilling staff members on their roles and responses, and trying out critical systems. Such exercises may be discouraging at first, as the drills and dry runs reveal weaknesses and failure points. But remember, testing helps uncover problems that need further attention.

Disaster recovery plan testing takes two forms: functionality and situational.

- Functionality testing determines whether secondary systems function as they were designed to and permit resumption of business processes. Test results will yield useful information about necessary plan modifications, composition of business unit recovery teams and other critical elements in any disaster recovery effort.
- Situational tests are similar to fire drills. They begin with the simulation of an actual disaster as a way of evaluating the cooperative's response. Results of these exercises should be measured against the cooperative's previously defined recovery time and point objectives. Since there's no way to guarantee that all of a cooperative's key personnel, or all of its business unit recovery team leaders and secondary leaders, will be available to respond in the event of a disaster, situational tests should also probe how the plan works in the absence of such people.

ONGOING PREPAREDNESS

Business environments are constantly evolving as personnel, practices and tools change. An effective recovery plan should evolve with that environment. A plan developed and then put on a shelf may soon lose its ability to restore critical business functions when disaster strikes. It is important for the plan to reflect any changes in the organization's internal and business environments.

Change management becomes the "ongoing maintenance" of any recovery plan. Adjustments in a cooperative's normal business operations—new practices, hardware or software and staff in key positions—must also be taken into account. Processes for tracking such changes and incorporating them must be added.

BOARD POLICY

Exhibit 11B, "Cooperative Board Policy Template: Business Recovery Planning," contains a board policy for directing implementation of best practices for business recovery planning.

ADDITIONAL RESOURCES

Disaster Recovery/Business Continuity Vendors

- *SunGard Availability Systems, https://www.sungardas.com/en/*
- *IBM Business Continuity & Recovery Services, www.ibm.com/services/continuity*

Journals and/or Organizations

- *Disaster Recovery Journal (DRJ), www.drj.com*
- *Disaster Resource Guide, www.disaster-resource.com*
- *Rothstein Catalog on Disaster Recovery, www.rothstein.com*

Electric Cooperative Resources

- *NRECA Business and Technology Strategies, www.nreca.coop*
- *Federated Rural Electric Insurance Exchange, www.federatedrural.com*
- *National Information Solutions Cooperative, www.nisc.coop*
- *Southeastern Data Cooperative, www.sedata.com*

HOW TO IMPLEMENT A BUSINESS RECOVERY PLAN

EXHIBIT 11A

ACTION	IMPLEMENTATION SUMMARY	RELATED RECOMMENDATIONS
1 Management and the board are committed to business recovery planning. This commitment includes the following critical components: • Dedicating management time, staff time and financial resources to the undertaking. • Appointing a project team and leader.	A. Obtaining organizational support and buy-in. B. Setting aside financial resources to support the development of strategies and hire consultants, if necessary. C. Appointing a disaster recovery project manager. D. Creating a team of business unit managers and executives to determine critical processes and functions.	
2 The business recovery team of unit managers and executives periodically determine the organization's recovery objectives in terms of: • How quickly critical operations must be resumed. • How much data loss can be absorbed.	A. Determining recovery objectives: Recovery Time Objective (RTO) and Recovery Point Objective (RPO). B. Creating company-wide task forces to coordinate recovery efforts within each business unit. C. Identifying external resource needs such as consultants or vendors.	
3 Critical business functions are analyzed to determine the steps and components involved in completing tasks and meeting objectives; the technical strategy that best allows the cooperative to fulfill its recovery objectives is developed, including: • Assessing insurance coverage. • Budgeting for insurance, technical solutions, etc. • Creating a plan to bring each business unit into the recovery scenario along a timeline, and coordinating the resumption of operations at a secondary location (if necessary). • Setting up the chosen technical strategy including, maybe, construction at another location, working out contracts with site vendors or procuring equipment.	A. Analyzing business unit essential processes and functions. B. Identifying and selecting the technical strategy that will best help the cooperative meet its recovery objectives. C. Creating a budget based on technical strategy and business unit involvement. D. Reviewing insurance coverage options for primary facilities and the cost of doing business at secondary sites. E. Designing a management plan to coordinate recovery and resumption of business functions. F. Planning for the return to the home site to complete the business resumption cycle.	

(CONTINUED)

HOW TO IMPLEMENT A BUSINESS RECOVERY PLAN

EXHIBIT 11A

ACTION	IMPLEMENTATION SUMMARY	RELATED RECOMMENDATIONS
4 The cooperative's preliminary business recovery plan is validated by testing in several stages, such that: • Each stage adds more complexity to the test scenarios until the project team is confident the cooperative is prepared to conduct recovery operations. • Each stage of testing offers opportunities for lessons learned and enhancements to the recovery plan.	A. Testing the technical infrastructure. B. Testing each business unit's plan. C. Combining technical and business unit plans to test the entire recovery effort through the restoration of critical processes and functions.	
5 Regularly scheduled testing of the plan's components will be executed to monitor and adjust plans as business functions and support structures change.	A. Scheduling regular exercises that expand the scope and complexity of each segment of the recovery effort. B. Establishing a system to monitor and manage software, hardware and business unit changes between the primary and secondary locations.	

COOPERATIVE BOARD POLICY TEMPLATE

EXHIBIT 11B

SUBJECT: BUSINESS RECOVERY PLANNING

I. PURPOSE

To set forth policy relating to the cooperative's preparedness to minimize disruption of its operations, member service, human resources and administrative capabilities during times of trauma or disaster, and require development of recovery strategies to restore the infrastructure necessary to maintain business continuity.

II. POLICY

It is the policy of the Board of Directors that as part of its responsibility to consumer-members for providing safe and reliable service, the cooperative will require the development of recovery strategies and plans for restoring business operations and utility services stemming from damage due to disasters.

III. EXPECTATION

A. Business Recovery Plan Effectiveness

Business recovery plans will generally adhere to the following development process:

1. Sufficient funds will be budgeted to obtain such software, offsite storage, consulting services and other resources to support staff's training and time commitments to recovery plan development.
2. Risks and recovery objectives (e.g., time lapse allowed for resumption of critical functions) will be examined and resources for meeting them will be identified. Reassessment of risks and recovery objectives will be conducted on a regular basis to ensure correct resources are identified.
3. Plans will be developed to mitigate identified risks and outline recovery strategies to meet stated recovery objectives. The plans will also detail and direct internal and external resources necessary to conduct recovery operations.
4. Functionality and situational testing will be used to exercise the plan and identify improvement needs.
5. The plan will be maintained by diligent management of software, hardware and business unit change requirements.

B. Policy Implementation Guidance

The cooperative shall develop and implement business recovery plans, generally, as follows.

1. Staff will be assigned to maintain adequate expertise in disaster preparedness and business recovery planning.
2. Sufficient resources will be devoted to analysis of risks, prioritization of vital business processes, resources and alternatives, plan development, and testing to ensure the cooperative's capabilities to meet its responsibilities.

IV. IMPLEMENTATION AND COMPLIANCE

Implementation: Management shall be held accountable for developing, implementing and maintaining effective business recovery plans, testing and, if necessary, executing them as well as periodically reporting to the Board of Directors on opportunities to improve the cooperative's plans and this policy.

Compliance: The Board of Directors will periodically evaluate management's progress in plan development, testing and maintenance and provide guidance as appropriate to ensure that the plan meets the intent of this policy.

The initial policy was established by the Board of Directors at its meeting (date).

APPROVED: ____

A Board's Oversight Role as Fiduciary and Regulator

Members of an electric cooperative's board of directors take on two distinct roles—fiduciaries required to act in the best interest of the consumer-members, and regulators that set the price of electric services and related provisions of service policies.

As fiduciaries directors must demonstrate a high degree of care in overseeing the membership's money and property. The role of regulator requires the board to ensure that rates charged for services are adequate to cover the cost of services in a fair and non-discriminatory manner.

While states have historically taken on the responsibility of approving rates (tariffs) charged by investor-owned utilities for providing services, as of 2018 electric cooperatives in 33 states are exempt from state regulatory oversight either by law or membership vote. In those states, cooperatives are deemed to be self-regulated because directors are elected by those they regulate, and the cooperative business model provides no incentive for boards to raise rates higher than what's necessary to operate the cooperative in a financially sound manner.

THE BOARD'S FIDUCIARY ROLE

As fiduciaries of the members' vested interest in the cooperative, directors share an obligation to understand economics of the cooperative's operations, its power supply arrangements, the basic process of establishing rates and the role of rates in shaping consumer behavior. The board, working collaboratively with management, has an obligation to members to perform due diligence in rate-making decisions. Therefore, the board must take into consideration the advice of management (and others who are authorities in rate-making) in deciding the cooperative's business objectives, what members should do in support of these objectives and what type of pricing will encourage action.

In its rate-making function the board should link the cooperative's strategic goals with the rate-making process. In doing so, the board needs to address five questions:

1. What are the cooperative's strategic financial goals?
2. What objectives does the cooperative want to achieve through rate design in addition to meeting strategic goals?
3. What steps will the cooperative take to ensure compliance with federal tax law and cooperative principles?
4. How will the cooperative address other issues, such as competition, that affect consumers and consumer acceptance? [1]
5. How does the multi-directional flow of electricity impact rate-making and changes to the cooperative business model? [2]

1. "Rate Strategies for 21st Century Challenges: A Guide to Rate Innovation for Cooperatives," CFC/NRECA, 2010
2. "Retail Rate Guide, Volumes 1 and 2," CFC/NRECA, 2017

THE BOARD'S REGULATOR ROLE

While a number of agencies and rulemaking bodies such as RUS and the Financial Accounting Standards Board (FASB) have explicitly recognized electric cooperative boards as a regulator, cooperative directors should keep in mind the three primary reasons they have been given this power.

1. Cooperatives are owned and governed by their consumers in their localities, unlike investor-owned utilities where customers have little or no voice in corporate governance. Because the cooperative's ratepayers and owners are the same, the cooperative is presumed to act in the best interests of its consumer-members.
2. Cooperatives are required by federal tax laws and some state laws to operate at-cost, allocating any revenue in excess of costs back to the consumers on the basis of their patronage. Therefore, it is presumed that cooperatives do not increase prices unreasonably to maximize their profits (like investor-owned utilities do to allow fair investment earnings for their stockholders) because they do not earn profits.
3. Since some cooperatives are subject to RUS (federal) oversight, including approval of financing, plant additions, major contracts and capital credits retirements, state regulatory jurisdiction becomes duplicative and unnecessary.

PRINCIPLES OF SETTING RATES AND POLICIES

When establishing rates (tariffs) and related service policies or regulations, cooperative boards should demonstrate the following principles:

1. Policies and/or regulations should be justifiable and address a real need or concern required to sustain the cooperative's business purpose.
2. Board-approved rates and policies should be customary and usual—fall in line with those of other utilities in the area. For example, a cooperative policy requiring new consumers to provide a deposit in advance of service that is significantly higher than what any other utility charges could be deemed as not being "customary and usual."
3. Any policy or regulation should be applied consistently to all similarly situated consumers. It should not be arbitrary, or else consumers are likely to view the policy as unfair or even discriminatory. RUS borrowers also must keep in mind the primary reason that they are allowed access to federal loan dollars is because they agree, under the "area coverage rule, to serve all eligible members within their defined service territory."

A CAUTIONARY NOTE

Federal antitrust laws prohibit agreements to set prices among actual or even potential competitors. Such discussions could be viewed as an "invitation" to illegal price fixing. Individual violators can face up to $1 million in personal criminal fines and 10 years in jail. Therefore, any discussion about cooperative rates stemming from the materials presented herein should be focused on each individual cooperative's financial goals, revenue needs, regulatory and lender requirements and competitive rate strategy.

FAIRNESS

One of the primary reasons electric cooperatives are granted "self-regulation" status is that members elect directors who approve policies and rates. As noted earlier, cooperatives should provide a process that provides consumer-members with a reasonable opportunity to make concerns known to the cooperative. In other words, cooperatives should have a consistent process in place to allow for a "fair hearing" of a member's dispute or concern about ways a rate or service policy has been interpreted and applied.

APPROVING RATES AND SERVICE RULES

When a board fulfilling its role as regulator undertakes discussion for setting rates, three primary considerations must be addressed:

1. Is the rate just, reasonable and defensible?
2. Is the rate sufficient to cover necessary costs?
3. Is the rate non-discriminatory regarding consumers, classes of consumers, location and ability to pay?

It is important, too, for electric cooperative boards to be aware of and sensitive to the potential impact that service disconnects have on the livelihood and welfare of a consumer. Many states restrict or otherwise prohibit the termination of service used for heating or cooling that could result in harm to consumers during periods of extreme cold or hot weather. Therefore, even though many cooperatives are not subject to state utility regulation, they should attempt to comply with the spirit and intent of state laws on cutoff moratoriums.

STANDARDS OF COOPERATIVE BOARD REGULATION

"When substituting itself for a utility regulatory commission, a cooperative board should keep in mind the reasons why it has been given authority to regulate the cooperative. When a cooperative appears to be unresponsive to consumer concerns, appears distant from its community, raises prices above what appear to be 'reasonable' levels, or simply does not 'act like a cooperative,' it increases pressure for outside regulation.

"It should also be remembered that another key regulatory function of the electric cooperative board involves communication. Establishing fair policies and procedures ("regulations") after giving careful consideration to members' interests and concerns is not enough. Those regulations, as well as some of the thought that went into developing them, should be communicated clearly and effectively to cooperative members and others. Without such communication, members may feel their concerns or needs are not being considered, or that they have no recourse to resolve a problem. In some situations, this can lead or contribute to member unrest, which can manifest itself in, among other things, board recalls, sellout attempts and litigation. Of course, if the policies and procedures that cooperative boards approve are not reasonable, passed without due consideration or are inconsistently applied, then cooperatives risk calls for legislative action to extend state and federal regulation to cooperatives" [1]

1. The Role of the Cooperative Board as 'Regulator,' NRECA Legal Reporting Service, February/March 2003

Audit Committee Functions Are Invaluable

Electric cooperatives operate as high-profile, local leading institutions. As a result, they are often held to higher standards of business conduct. Consumer-members, regulators, employees and other stakeholders expect them to set examples of integrity, reliability and ethics. Accordingly, boards of directors should be diligent in overseeing the finances, public reporting and control of their cooperatives' assets and liabilities.

Many cooperatives find it beneficial to delegate that oversight to an Audit Committee of board members assisted by management, staff, independent auditors, general counsel and others. Other cooperatives, however, assign these functions to the entire board. (In this chapter, references to the Audit Committee apply to both options.)

The Audit Committee should report to the full Board of Directors with information concerning its proceedings, any specific actions that it takes and any recommendations for consideration by the full board.

Increased public concerns regarding corporate fraud and electric utility reliability should compel cooperative boards to ensure they are providing adequate oversight, either directly or through an Audit Committee. To fulfill those responsibilities, directors should strive to understand key principles of the cooperative's business and operations, general accounting practices, financing arrangements, audit functions, affiliate activities, significant risks and liabilities, and major transactions.

Boards and their Audit Committees should carefully consider:

1. Engagement of independent auditors, the services they provide and related fees;
2. Communications and differences between management and auditors;
3. The cooperative's system of internal accounting and business controls;
4. Incentives that might cause employees or directors to misuse cooperative assets or cause misstatements in its financial reports; and
5. Opportunities to improve the efficiency and productivity of cooperative employees and assets.

Exhibit 13A, "How to Implement an Audit Committee," summarizes six characteristics of board oversight functions that can be considered by electric cooperatives. Implementation steps are outlined for each suggested practice.

AUDIT COMMITTEE (FORMATION) POLICY

Functions of an Audit Committee can be performed by the entire board or by a group of assigned directors. No matter what format is chosen, the cooperative's bylaws or a written policy should set forth the specific oversight tasks to be performed. It also should define best practices, and state the purpose, mission and responsibilities of the Audit Committee.

BYLAWS-STATED REQUIREMENT

Section 301 of the Sarbanes-Oxley Act of 2002 addresses the requirement of those entities subject to the law to have a board Audit Committee. Most electric cooperatives are not directly subject to this section. However, some may find it desirable to provide language reflecting this requirement in their bylaws. The formation, use of and responsibility of a standing Audit Committee stated in the bylaws can demonstrate to consumer-members the board's commitment to its oversight responsibility for ensuring sound cooperative accounting practices.

The following is sample language that a board might consider for inclusion in the bylaws:

> *"Board Audit Committee. The board shall have an Audit Committee that is directly responsible for appointing, compensating, and overseeing the work of any public accounting firm employed by the cooperative, including resolving disagreements between management and the auditor regarding financial reporting, for the purpose of preparing or issuing an audit report or related work, and each registered public accounting firm must report directly to the Audit Committee. Each member of the board Audit Committee: (1) must be a director; and (2) other than in the capacity as a member, director or member of a board committee, must not accept any compensatory fee from the cooperative.*
>
> *"The board Audit Committee shall establish procedures for (1) the receipt, retention and treatment of complaints received by the cooperative regarding accounting, internal accounting controls or auditing matters; and (2) the confidential, anonymous submission by employees of the cooperative of concerns regarding questionable accounting or auditing matters. The board Audit Committee may engage independent counsel and other advisers it determines necessary to carry out its duties.*
>
> *"The cooperative shall pay for the appropriate funding, as determined by the Audit Committee in its capacity as a committee of the board, for compensating (1) the registered public accounting firm employed by the cooperative for the purpose of rendering or issuing an audit report; and (2) any advisers employed by the Audit Committee."* [1]

CONSIDERATIONS FOR ADOPTING A BOARD AUDIT COMMITTEE POLICY

A policy to establish a board Audit Committee should address the following:

- How frequently the Audit Committee should meet.
- Whether meetings must be in person or by phone.
- What rules of governance apply.
- The number of members who must be present for a quorum.
- An annual calendar of responsibilities.
- Related housekeeping matters.

With the increasing number of responsibilities that Audit Committees should undertake, it is important to set aside adequate time for Audit Committee meetings. In addition to reviewing the annual audited financial statements with the auditors, the Audit Committee should review all annual and interim financial statements with management.

1. Bylaws Revision Guide," Revised June 1, 2013, NRECA

QUALIFICATIONS OF AUDIT COMMITTEE MEMBERS

Members of the Audit Committee must not have a relationship with the cooperative that appears to or actually interferes with the independent exercise of their oversight work. Freedom from apparent or real conflicts of interest must be a precondition of Audit Committee participation.

All members of the Audit Committee should have a working familiarity with basic finance and accounting practices. In addition, they should have an understanding of the cooperative's financial reporting and internal control issues, as well as its structure, business operations, internal controls, and types of transactions and other financial reporting matters. To support this oversight activity, many cooperatives provide additional training for Audit Committee members relating to business, finance, accounting and internal control topics.

An Audit Committee should undertake a self-assessment on a routine basis to:

- Assess strengths and weaknesses;
- Ensure it is accomplishing essential functions and duties in a timely manner and with appropriate attention; and
- Plan how it will continue to satisfy future responsibilities.

ENGAGEMENT OF INDEPENDENT AUDITORS

To ensure that the cooperative's independent auditors remain objective and diligent, the board or its Audit Committee should hire them. Members of the Audit Committee should be actively involved in selection interviews and in setting terms of the auditors' employment. The committee should evaluate candidate firms based on independence and professionalism, size of the firm, knowledge of the electric utility industry, location of offices, experience of the audit team and proposed fees. It also helps to query a candidate's clients about their satisfaction with the firm's services.

A written statement of each candidate firm's independence should be obtained, and the committee should actively engage in a dialogue with each firm about any disclosed relationships or services that may impact the auditor's objectivity and independence. Consider using different firms for audit and non-audit services to ensure auditor independence, and limit the number of years that the same audit firm or its lead auditor can conduct audits.

The Audit Committee also should review the planning, staffing and related scope of each annual audit with the independent auditors, as well as pre-approve fees and monitor actual payments as services are performed.

A COOPERATIVE'S INTERNAL AUDIT FUNCTION

Depending on the size and complexity of the cooperative, establishment of an internal audit function may be beneficial. This function can be completed by internal or external staff, depending on the financial and human resources available. Performance of some audit functions in-house can result in overall cost savings by creating routines for documenting and updating procedures, periodic testing of cash receipts and disbursement transactions, and special studies with cooperative staff. Such functions may be performed by current staff if independence can be assured and hiring an internal audit staff person is not cost-effective.

If an internal audit function is established, the head of that unit should report functionally to the Audit Committee and administratively to a member of management who has sufficient authority to protect its independence. The committee should review the independence of the internal auditor and compliance with the Institute of Internal Auditors Standards for the Professional Practice of Internal Auditing, as well as the continuing professional education plan for internal audit staff.

The Audit Committee should meet regularly, in private, with the head of the internal audit function to review the planning and staffing of the function and receive regular reports concerning the progress of audits and findings.

The types of matters that should be addressed in these sessions include, but are not limited to:

- Whether the internal auditors have encountered any difficulties in the course of their audits, including any restrictions on the scope of their work or access to required information;
- Any significant findings of the internal auditor with respect to internal control; and
- Any other matters the internal auditors or Audit Committee believes should be discussed privately.

EXPERT ADVISERS

In addition to the independent audit firm, an Audit Committee will usually need to call on other experts from time to time.

The committee should meet with the general counsel of the cooperative to discuss legal and regulatory developments and to assess compliance with applicable law, contractual obligations and the cooperative's ethics policy. Periodically, these meetings with the general counsel may need to be in executive session (without participation of management) to discuss any private matters, including potential material violations of law or breaches of fiduciary duties.

Committee members are encouraged to rely on the reports of management, the cooperative's general counsel, internal audit staff and independent auditors. For committee members to remain independent and completely fulfill their fiduciary duties to the cooperative. However, the Audit Committee should have the ability to engage its own consultants—at the cooperative's expense—when it deems such action necessary and appropriate.

INTERNAL CONTROL

Audit Committee members should understand basic principles of the cooperative's internal control system. The best practice is for Audit Committees to review management letters with the independent auditors and discuss their assessment of internal controls and, in particular, any significant deficiencies.

Electric cooperatives should encourage employees to report any legal or accounting concerns to management and have policies in place prohibiting retaliation against whistleblowers for reports made in good faith. The cooperative should appoint multiple, independent persons to receive those reports.

The Audit Committee should do two things:

1. Review with management, as well as the independent auditor and the internal auditor, any significant risks or exposure for the cooperative. In particular, the committee should be aware of the Statement on Auditing Standards No. 99 "Consideration of Fraud in a Financial Statement Audit," issued by the Auditing Standards Board of the American Institute of Certified Public Accountants (AICPA) in October 2002.
2. Assess the steps that management has taken to minimize such risks to the cooperative.

The Audit Committee also should review management's assessment of internal controls, as well as any significant findings with respect to internal control by the independent auditor or internal auditor, if applicable, together with management's responses.

For more information on internal controls, see Chapter 14 of this guide.

BOARD POLICY

An example of a board policy chartering an Audit Committee, directing its organization and operations, and defining its functions and responsibilities is shown in Exhibit 13B, "Cooperative Board Policy Template: Audit Committee of the Board of Directors." This policy instructs the board to review the charter and policy at least once each year and, after considering recommendations of management and others, amend it as appropriate.

ADDITIONAL RESOURCES

- *E&Y Audit Committee Toolkit, http://www.ey.com/us/en/issues/governance-and-reporting/audit-committee/staying-on-course--a-guide-for-audit-committees*
- *AICPA Audit Committee Toolkit, http://www.aicpa.org/forthepublic/auditcommitteeeffectiveness/toolkits/pages/default.aspx*
- *https://na.theiia.org/Pages/IIAHome.aspx*

HOW TO IMPLEMENT AN AUDIT COMMITTEE

EXHIBIT 13A

ACTION	IMPLEMENTATION SUMMARY	RELATED RECOMMENDATIONS
1 The cooperative's Board of Directors charters an Audit Committee (if not separately, then the entire board or some other committee) with specific authorities and responsibilities, including: • Frequency and governance of its meetings. • Review of annual and interim reports and news releases. • Periodic reporting to the full board.	A. Conduct research on literature and other sources of guidance regarding the responsibilities and functions of consumer-owned enterprises such as electric cooperatives. B. Consider the cooperative's scale of operations and financial activities and vulnerability to risks typically addressed by the Audit Committee. C. Draft, discuss and adopt a board policy establishing the charter appropriate to the cooperative's situation and needs.	Cooperative Business Planning
2 Audit Committee members are trained to fulfill their responsibilities and demonstrate required qualities, including: • Independence and freedom from conflicts of interest. • Familiarity with financial and accounting practices. • Understanding of the cooperative's business and financial reporting. • Improving their effectiveness through annual self-assessments.	A. Document Audit Committee position requirements for business knowledge, financial auditing and independence, by reference to public sources. B. Determine educational requirements of each participating board member and commence training to fill gaps. C. Routinely evaluate individual and group performances.	
3 The Audit Committee engages the cooperative's independent audit firm and reviews its work by: • Pre-approving and monitoring the audit firm's fees. • Resolving disagreements between cooperative management and the audit firm. • Reviewing annual financial statements and accounting policies.	A. Determine the cooperative's needs in terms of independent auditor firm electric cooperative knowledge, other capabilities and costs. B. After considering cooperative management recommendations, select an independent audit firm and coordinate staffing, scheduling and fee arrangements. C. Coordinate the audit engagement with cooperative management.	

HOW TO IMPLEMENT AN AUDI T COMMITTEE (CONTINUED)

EXHIBIT 13A

ACTION	IMPLEMENTATION SUMMARY	RELATED RECOMMENDATIONS
4 The Audit Committee directs, if cost-effective, an internal audit function subject to: • Audit Committee review of its staffing, work plans and professional qualifications. • Regular reporting requirements as to internal audit findings and recommendations. • Periodic private meetings with the Audit Committee to discuss sensitive issues.	A. Consider the potential benefits (including reduction of independent audit cost and other business risks) as well as expected costs and, if appropriate, establish an internal audit function within the cooperative. B. Develop a plan of internal audit work to augment the cooperative's independent audit and provide assurances to the Audit Committee. C. Periodically consider reports and communications with the internal auditors.	
5 The Audit Committee has access to such consultants and professionals as it needs to fulfill its responsibilities, including: • Routine private discussions with the cooperative's general counsel. • Accounting professionals engaged for purposes other than audits of the cooperative. • Other consultants as needed.	A. Routinely discuss any pertinent financial, accounting or auditing issues with the cooperative's general counsel. B. Engage other consultants or professionals, if appropriate, to assist the Audit Committee in performance of its duties.	
6 The Audit Committee ensures maintenance and testing of the cooperative's internal control system by: • Routine review, with the cooperative's independent audit firm of its management report as well as internal control deficiencies. • Assessing significant risks to the cooperative and management's responses. • Encouraging employees to report legal or accounting concerns.	A. Direct the cooperative's management and independent auditors to periodically provide comprehensive presentations on internal controls, assessment and plans for strengthening it. B. Periodically evaluate operation of the cooperative's code of ethics, business planning and other risk-management processes. C. Correct internal control weaknesses as appropriate.	Internal Control Systems Code of Ethics

COOPERATIVE BOARD POLICY TEMPLATE

EXHIBIT 13B

SUBJECT: AUDIT COMMITTEE OF THE BOARD OF DIRECTORS

I. PURPOSE

To set forth a policy for the establishment and operation of an Audit Committee selected from among members of the Board of Directors to assist the board in fulfilling its financial stewardship role on behalf of consumer-members.

II. POLICY

The Audit Committee is chartered by the Board of Directors to assist the board in fulfilling its oversight responsibilities to the cooperative's consumer-members, lenders, regulators and the community. This assistance includes scrutiny of the cooperative's financial reporting process, systems of internal accounting and financial controls, code of ethics compliance, engagement of independent auditors and such other functions as the board may delegate to the committee.

III. EXPECTATION

In discharging its duties, the Audit Committee is empowered to investigate any matter brought to its attention with full access to all books, records, facilities and personnel of the cooperative and is authorized to engage independent counsel and other advisers it determines necessary to carry out its responsibilities.

A. Organization and Operations of the Audit Committee

1. The Board of Directors appoints members to the Audit Committee, as provided in the cooperative's bylaws for establishment of committees of the board, as well as its chair/president and vice chair/vice president. The board may resolve to constitute itself as an Audit Committee-of-the-Whole.
2. The committee will meet at least quarterly to:
   - Adopt a training program for its members (immediately following appointment);
   - Engage independent auditors to allow for timely evaluations of the cooperative's internal control systems and examination of its annual financial statements; and
   - Review the independent audit and management reports.
3. As circumstances require, the board committee chair/president is authorized to convene additional meetings to confer with the cooperative's general counsel and internal audit staff or for other purposes.
4. The Audit Committee receives training by the cooperative's finance and accounting staff, independent auditors, industry associations or other sources to ensure its members have working familiarity with the cooperative's finance and accounting practices, its business and internal control systems and the role of its independent auditors.
5. The presence of a majority of Audit Committee members in person or by teleconference is required for transaction of business.
6. Minutes of the committee's meetings will be promptly distributed to all members of the Board of Directors.
7. At least once each year, the committee conducts a performance self-evaluation and reports the results to the board.

B. Functions and Responsibilities of the Audit Committee

1. Continuing education to maintain expertise sufficient to provide oversight of the cooperative's risk assessment, financial reporting, internal control, audit and related processes.
2. Specification of the required qualifications of independent auditors to serve the cooperative including independence, internal control evaluation capabilities and technical competence as well as expertise in public utility operation and regulation, taxation of electric cooperatives and the cooperative's diversified businesses.
3. Engagement of independent auditors and review of their plans to evaluate the cooperative's internal controls and audit execution, review of audit and management reports, resolution of conflicts with management and payment of fees.
4. Review of proposed work plans of the cooperative's internal audit function, if any, as well as internal audit findings and recommendations regarding internal controls and other matters.
5. Review of the cooperative's annual report, reports to regulatory authorities and lenders and other published reports.
6. Investigation of such other matters as may come to the committee's attention.

COOPERATIVE BOARD POLICY TEMPLATE (CONTINUED)

EXHIBIT 13B

IV. IMPLEMENTATION AND COMPLIANCE

Implementation: The board chair/president shall ensure the implementation and administration of this policy

Compliance: At least once each year the Board of Directors shall review this policy to ensure compliance. In doing so the board will consider recommendations of cooperative management and others, and amend it as appropriate.

This initial policy was established by the Board of Directors at its meeting (date).

APPROVED: ______________________________

Internal Control Systems Provide Added Assurances

Depending on a cooperative's size and complexity, internal control provides added assurances the cooperative functions at expected levels.

Internal controls are a system of processes implemented by a cooperative's Board of Directors, management and staff to ensure objectives are achieved. Properly instituted, internal control can contribute to the effectiveness and efficiency of operations, as well as reliability in financial reporting and compliance with applicable laws and regulations.

AUDIT STANDARDS AND COURT EXPECTATIONS FOR PROTECTING COOPERATIVE RESOURCES

SAS 99
The Statement on Auditing Standards No. 99 (SAS 99) "Consideration of Fraud in a Financial Statement Audit," by the Auditing Standards Board of the American Institute of Certified Public Accountants (AICPA), became effective for audits of financial statements in December 2002. SAS 99 was issued in part in response to accounting scandals at Enron, WorldCom, Adelphia and Tyco. The standards address the shared responsibility of boards and management for protecting a cooperative's resources from fraud.

The standards define fraud as an intentional act that results in a material misstatement of financial statements. There are two types of fraud addressed: misstatements arising from fraudulent financial reporting (e.g., falsification of accounting records) and misstatements arising from misappropriation of assets (e.g., theft of assets or fraudulent expenditures).

The standards require boards and management to periodically:

1. Evaluate management's identification of fraud risks.
2. Evaluate management's implementation of anti-fraud measures.
3. Determine how management communicates ethical conduct.

U.S. Sentencing Commission and U.S. Department of Justice Guidelines
The Federal Sentencing Guidelines (§ 8B2.1[b][1], as amended 2013) of the U.S. Sentencing Commission, together with additional 2017 guidance from the U.S. Department of Justice, identify the hallmarks or core elements generally considered by regulators as the minimum requirements for an effective compliance program. These collective guidelines provide a strong incentive for every business in the United States, including electric cooperatives, to have an "effective compliance and ethics program" designed to prevent and detect criminal conduct.

An effective compliance program with an integrated framework and strong internal controls can help an electric cooperative prevent violations and consequences (such as criminal penalties, civil damages, civil lawsuits and reputational harm). The core elements of an effective program include:

- Strong organizational leadership and ethical culture;
- Standards and procedures for an effective program;
- Oversight, autonomy and resources for the compliance function;
- Ongoing training and communication on compliance matters;

- Internal reporting mechanisms;
- Performance incentives and disciplinary measures to promote and enforce compliance;
- Follow-up and investigations of complaints and violations;
- Due diligence and oversight of third-party relationships;
- Monitoring and auditing of program effectiveness; and
- Ongoing risk assessment to maintain program effectiveness.

Board commitment and top-level support are vital to the successful development of an ethical culture and effective compliance program. The Board of Directors and senior management should:

- Be knowledgeable about the conduct of operations of the cooperative's compliance and ethics program and exercise reasonable oversight; and
- Provide strong, explicit and visible support for the compliance program and code of ethics.

INTERNAL CONTROL CONCEPTS

There are four key concepts of internal control:

1. Internal control is a process. It is a means to an end, not an end in itself.
2. People affect internal control. It is not merely policy manuals and forms, but people at every level of an organization.
3. Internal control can be expected to provide only reasonable assurance to management and the board.
4. Internal control is geared to the achievement of objectives in one or more separate but overlapping categories.

Internal control further strengthens the following:

- Reliability and integrity of information.
- Compliance with policies, plans, procedures, laws and regulations.
- Safeguarding of assets.
- Economical and efficient use of resources.
- Accomplishment of established objectives and goals for operations or programs.

INTERNAL CONTROL COMPONENTS

Internal control consists of five interrelated components: control environment, risk assessment, control activities, information and communication, and monitoring. Each component contains the three core objectives of internal control: efficiency, reliability and compliance. Exhibit 14A, "How to Implement Internal Control Systems," contains suggested actions for each component.

CONTROL ENVIRONMENT

The core of any cooperative is people—their individual attributes, integrity, ethical values and competence—and the environment they operate in. They are the engine that drives a cooperative and the foundation on which everything rests.

A control environment with an emphasis on integrity and ethical values reduces the impact that the following corporate incentives and temptations may have on financial reporting practices:

Incentives

- Pressure to meet unrealistic performance targets, particularly short-term results.
- Lavish performance-driven awards.
- Upper and lower cutoffs on any bonus plan.

Temptations

- Excessive decentralization that leaves top management unaware of actions taken at lower organizational levels.
- Weak internal control functions that fail to detect or report improper behavior.
- Insufficient penalties for improper behavior.

RISK ASSESSMENT

CEOs/general managers and directors of most electric cooperatives are usually aware of the major risks faced. However, new risks may arise over time as business conditions and decision-makers change. For example, new computer systems and Internet applications, staff reductions or replacements, power supply relationships, financing and business investments may expose the cooperative to uncertainties not previously recognized. Board members may reasonably expect that, as they and management teams seize opportunities to improve services to consumers and implement innovation, unforeseen risks can accompany them.

Understanding the nature, size and probability of significant cooperative risks doesn't have to be a costly process and, in fact, should usually be part of the annual independent audit. One simple approach starts with cooperative staff doing the following:

- Identifying the financial and other risks associated with line items in the income and cash flow statements and balance sheet;
- Estimating the magnitudes of those risks and their probabilities; and
- Explaining controls in place to mitigate them.

The board can then review the resulting staff report with the independent auditors to assess its completeness.

CONTROL ACTIVITIES

Control activities are policies and procedures that help ensure management directives are carried out. The activities serve as mechanisms for managing achievement of objectives. In a sense, controls are built directly into the management process. During the risk assessment process, management should identify the control activities needed to address risks identified.

Control activities can be mainly classified as preventive, detective or directive:

<u>Preventive</u>: Stop a risk from occurring (e.g., segregation of duties, authorization levels/approvals).

<u>Detective</u>: Determine if a risk has occurred (e.g., exception reports, reconciliations).

<u>Directive</u>: Avoid risks by providing specific ways to do things (e.g., standard policies and procedures).

Controls can be defined as hard or soft. Soft controls are useful, though not precisely definable, and can be best explained with common characteristics and examples. They tend to be informal, subjective and intangible. Examples of soft controls include integrity, ethical values, competence and strong leadership.

Hard controls tend to be formal, objective and quantitatively measurable. Examples of hard controls include policies and procedures, organizational structure, inspections and reconciliation.

INFORMATION AND COMMUNICATION

Surrounding these activities are information and communication systems that enable electric cooperative staff to capture and exchange information needed to conduct, manage and control operations. Pertinent information must be identified, captured and communicated in a form and timeframe that allows staff to carry out their responsibilities. Information systems produce reports containing operational, financial and compliance-related information that make it possible to run and control the cooperative.

MONITORING

The entire information and communication process should be monitored and modified as necessary. In this way, the cooperative can react dynamically as conditions warrant. Monitoring is the process of assessment by appropriate personnel of the design and operation of controls on a suitably timely basis, and taking necessary actions.

Monitoring applies to all activities within the cooperative, and sometimes to outside contractors as well. It may include outsourced cash collections, outsourced payment processing or waste management (compliance with U.S. Environmental Protection Agency regulations) along with ongoing activities that assess the effectiveness of internal control systems in the ordinary course of operations.

Separate evaluations performed by management and/or internal audit are other ways to monitor internal control.

WHAT INTERNAL CONTROL CAN DO

Internal control can help the cooperative achieve its performance and earnings coverage targets and prevent loss of resources. It can help ensure reliable financial reporting and that the enterprise complies with laws and regulations, avoiding damage to its reputation and other consequences. In sum, it can help the cooperative pursue its strategic and business plans, and avoid pitfalls and surprises along the way.

WHAT INTERNAL CONTROL CANNOT DO

Internal control cannot change an inherently poor manager into a good one. In addition, shifts in government policy or programs, competitors' actions or economic conditions can extend beyond management's control. Internal control cannot ensure success, or even survival.

An internal control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance to management and the board regarding achievement of the cooperative's objectives. The likelihood of achievement is affected by limiting factors such as:

> <u>Judgment</u>: Managers in a well-controlled organization can make bad decisions.
>
> <u>Breakdowns</u>: People with control responsibilities may not carry them out effectively.
>
> <u>Management Override</u>: A manager may intentionally go outside established practices for illegitimate purposes.
>
> <u>Collusion</u>: Two or more people can collaborate to subvert controls.
>
> <u>Cost vs. Benefit</u>: Resources are limited. Managers properly accept a degree of risk when the cost of controlling that risk exceeds the benefit.

INTERNAL CONTROL RESPONSIBILITIES

Everyone in a cooperative shares some responsibility for internal control, and those responsibilities should be explicitly or implicitly part of everyone's job description. Virtually all employees produce information used in the internal control system or take other actions that effect control. Also, all personnel should be responsible for communicating problems in operations, noncompliance with the code of conduct and other policy violations or illegal actions.

Management, the board of directors and internal auditors have specific roles and responsibilities for internal control.

Board of Directors' Role (See Policy Exhibit 1B)

Management is accountable to the Board of Directors, which is responsible for providing governance, guidance and oversight. Effective board members are objective, capable and inquisitive. They also have knowledge of the key principles of the cooperative's activities and environment, and commit the time necessary to fulfill their board responsibilities. Without effective oversight and controls, management may be in a position to override controls and ignore or stifle communications from subordinates, enabling dishonest management to intentionally misrepresent results to cover their tracks.

A strong, active board, particularly when coupled with effective upward communication channels and capable financial, legal and internal audit functions, can best identify and correct problems.

Management's Role

The CEO, being ultimately responsible, should assume "ownership" of the system. More than any other individual, this person sets the "tone at the top" that affects integrity, ethics and other factors of a positive control environment. The CEO fulfills this duty by providing leadership and direction to senior managers and reviewing the way they're controlling the business. Senior managers, in turn, assign responsibility for establishing more specific internal control policies and procedures to personnel responsible for a particular unit's functions. In any event, in a cascading responsibility, a manager effectively serves as chief executive of his or her sphere of responsibility.

Internal Auditor's Role

In larger cooperatives, internal auditors can play an important role in evaluating the effectiveness of control systems and contribute to ongoing effectiveness. Because of organizational position and authority, an internal audit function often plays a significant monitoring role.

Other Contributors

A number of external parties often contribute to the achievement of a cooperative's objectives. External auditors, bringing an independent and objective view, contribute directly through the financial statement audit and indirectly by providing information useful to management and the board in carrying out their responsibilities. Legislators, regulators, members, financial analysts, rating agencies and the news media also provide useful information in effecting internal control. External parties, however, are not responsible for, nor are they a part of, the cooperative's internal control system.

COOPERATIVE-SPECIFIC

Because each cooperative has its own set of objectives and implementation strategies, there will be differences in objectives, structure and related control activities. Even if two cooperatives have identical objectives and structures, their control activities would differ. Each cooperative would be managed by different people who use individual judgments in effecting internal control. Moreover, controls reflect the environment and industry in which the cooperative operates, as well as the complexity of its organization—location and geographical dispersion, the extensiveness and sophistication of operations, and information processing methods—as well as history and culture.

APPLICATIONS TO SMALL AND MID-SIZE COOPERATIVES

Underlying control activities in smaller electric cooperatives are not likely to differ significantly from those in larger systems, but the formality will vary. Further, smaller cooperatives may find that certain types of control activities are not always relevant because of highly effective controls applied by management.

An appropriate segregation of duties sometimes appears to present difficulties in smaller organizations, at least on the surface. Even cooperatives that have only a few employees, however, can usually parcel out responsibilities to achieve necessary checks and balances. For example, it is not uncommon, where there is a risk of improper cash payments, for the CEO to be named the only authorized check signer, or to require that monthly bank statements be delivered unopened directly to him or her for review of paid checks.

Controls over information systems, particularly general computer controls and, more specifically, access security controls, may present problems to small and mid-size cooperatives due to the informal way control activities are often implemented. Once again, a solution can often be found in the greater amount of direct management involvement. Reasonable assurance that any material errors would be detected often comes from management's continual use of information generated by the system, and relating that information to direct knowledge of those activities coupled with key controls applied by other personnel.

ADDITIONAL RESOURCES

- *COSO Internal Control-Integrated Framework Volumes 1 & 2: American Institute of Certified Public Accountants, 1994.*
- *Protiviti Knowledge Leader, COSO Internal Control Framework, Protiviti, Inc.*

HOW TO IMPLEMENT INTERNAL CONTROL SYSTEMS

EXHIBIT 14A

ACTION	IMPLEMENTATION SUMMARY	RELATED RECOMMENDATIONS
1 Integrity and Ethical Values • Management does not intervene or override established controls. • Reduce pressure to meet unrealistic performance targets—particularly for short-term results, and the extent that compensation is based on achieving those performance targets.	A. Provide guidance on the situations and frequency with which intervention may be needed. B. Document intervention and appropriately explain. C. Prohibit manager override of established controls. D. Investigate deviations from established policies and documents. E. Be aware of temptations that can test people's adherence to ethical values.	
2 Management's Philosophy and Operating Style • Management considers the risks before entering into ventures. • Monitor personnel turnover in key functions (e.g., operating, accounting, data processing and internal audit). • Management emphasizes strong data processing and accounting functions. • Senior and operating management frequently interact, particularly when operating from different locations. • Management supports conservative accounting policies, properly applies accounting principles, discloses financial information and does not manipulate records.	A. Determine causes of excessive turnover of managers or supervisors, and unexpected or short-notice exits at other levels. B. Senior management should frequently visit subsidiary or divisional operations. C. Hold group or divisional management meetings on a regular basis. D. Ensure that personnel do not submit inappropriate reports to meet targets. E. Ensure that estimates do not stretch facts to the edge of reasonableness.	
3 Assignment of Authority and Responsibility • Assign responsibility and delegation of authority to deal with organizational goals and objectives, operating functions and regulatory requirements, including responsibility for information systems and authorizations for changes.	A. Responsibility for decisions should be related to assignment of authority and responsibility. B. Consider proper information in determining the level of authority and scope of responsibility assigned to an individual. C. Strike a balance between authority needed to "get the job done" and the involvement of senior personnel. D. Empower competent employees to correct problems or implement improvements within clear boundaries of authority.	

(CONTINUED)

HOW TO IMPLEMENT INTERNAL CONTROL SYSTEMS

EXHIBIT 14A

ACTION	IMPLEMENTATION SUMMARY	RELATED RECOMMENDATIONS
4 Operational Controls • Control activities encompass a wide range of policies and procedures that help management identify the actions necessary to achieve a cooperative's objectives. Some examples of commonly performed control activities include top-level reviews; direct functional or activity management; information processing; physical security; performance indicators; and segregation of duties. Control activities should also be documented through sign-off to enhance employee accountability and as evidence of performance. • Develop and implement appropriate policies with respect to each of the cooperative's activities.	A. **Top-Level Reviews—**Review actual performance versus budgets, forecast, prior periods and competitors. Analyze performance and perform follow-up procedures as necessary on an exception basis. Examples include monitoring major initiatives such as cost containment or reduction programs, joint ventures and financing. B. **Direct Functional or Activity Management—**Perform managerial reviews. Examples include reviewing daily cash flow reconciliations and relating operating results to economic statistics and targets. C. **Performance Indicators—**Develop performance indicators and have managers or appropriate staff investigate unexpected results or unusual trends. Identify the underlying circumstances where the activity objectives are in danger of not being achieved. Monitoring purchase price variances is an example of this activity. D. **Segregation of Duties—**Divide the responsibilities for authorizing transactions, recording them and handling the related asset among different people to reduce the risk of error or inappropriate actions. For example, a manager authorizing credit sales would not be responsible for maintaining accounts receivable records or handling cash receipts.	

HOW TO IMPLEMENT INTERNAL CONTROL SYSTEMS (CONTINUED)

EXHIBIT 14A

ACTION	IMPLEMENTATION SUMMARY	RELATED RECOMMENDATIONS
5 Information Systems Control • Information control activities can generally be classified as general or application controls. General controls apply to all computer systems to help ensure their continued operation. They include data center operations, system software, access security, and application system development and maintenance controls. Application controls are designed to help ensure the completeness and accuracy of transaction processing, authorization and validity.	A. *Data Center Operations*—Activities include job set-up and scheduling, operator actions, backup and recovery procedures, and contingency or disaster recovery planning. B. *System Software*—The system software can report on uses of utilities, so that if someone accesses these powerful data-altering functions, at the least their use is recorded and reported for review. C. *Access Security*—Perform periodic and timely reviews of user profiles that permit or restrict access to IT applications. Verify that the user rights are appropriate given the user's job duties as part of the access reviews. Immediately terminate passwords and user IDs when employees leave the organization.	
6 Information and Communication • Obtain external and internal information and provide management with the necessary reports on the cooperative's performance relative to established objectives. • Develop or revise information systems based on a strategic plan for information systems linked to the cooperative's overall strategy and responsive to achieving the cooperative-wide and activity-level objectives. • Be receptive to employee suggestions of ways to enhance productivity, quality or other similar improvements. • Allow for open and effective communication channels with customers, suppliers and other external parties for sharing information on changing customer needs. • Develop an acceptable-use policy assuring maintenance of security and protection against misuse of the cooperative's systems.	A. Have a mechanism in place to obtain relevant external information on market conditions, competitors' programs, legislative or regulatory developments and economic changes. B. Identify and regularly report internally generated information critical to achievement of the cooperative's objectives. C. Develop a mechanism (e.g., an information technology steering committee) for identifying emerging informational needs. D. Develop a long-range information technology plan that is linked to strategic initiatives. E. Establish realistic mechanisms for employees to provide recommendations for improvement. F. Acknowledge good employee suggestions by providing cash awards or other meaningful recognition. G. Capture suggestions, complaints and other input and communicate them to relevant internal parties. H. Report information upstream as necessary and explain follow-up actions taken.	

(CONTINUED)

HOW TO IMPLEMENT INTERNAL CONTROL SYSTEMS

EXHIBIT 14A

ACTION	IMPLEMENTATION SUMMARY	RELATED RECOMMENDATIONS
7 **Ongoing Monitoring** • Personnel, in carrying out their regular activities, obtain evidence as to whether the system of internal control continues to function. • Use communications from external parties to corroborate internally generated information or indicate problems.	A. Management should compare operational information obtained in the course of their daily activities with system-generated information. B. Integrate or reconcile operating information used to manage operations with data generated by the financial reporting system. C. Require operating personnel to "sign off" on the accuracy of their units' financial statements. Hold them accountable if errors are discovered. D. Investigate the underlying causes of customer complaints about billings – indicating system deficiencies in the processing of sales transactions. E. Use communications from vendors and monthly statements of accounts payable as a control-monitoring technique. F. Consider information provided to the cooperative from regulators regarding compliance or other matters that reflect on the functioning of the internal control system.	

COOPERATIVE BOARD POLICY TEMPLATE

EXHIBIT 14B

SUBJECT: INTERNAL CONTROL SYSTEMS

I. PURPOSE

To set forth policy regarding establishment and maintenance of the cooperative's system of internal control designed to promote efficiency of operations, reliability of financial reporting and compliance with applicable laws and regulations.

II. POLICY

It is the policy of the Board of Directors that the cooperative will maintain adequate internal control programs and processes to ensure the integrity and accuracy of financial management systems, and that such control programs are in compliance with applicable laws and regulations.

III. EXPECTATION

A. Internal Control Components

The Board of Directors instructs cooperative management to establish and maintain the following internal control components, to the extent that costs of controlling risks do not exceed their benefits.

1. An organizational environment where integrity and values control behavior and promote ethical conduct.
2. Assessment of risks to the achievement of critical success factors and their related goals.
3. Development and execution of operating policies and procedures adequate to control cooperative activities, address risks and ensure execution of management directives.
4. Information and communication systems sufficient to capture and transmit important cooperative information as required for decision-making, consumer service and business operations.
5. Routine monitoring of internal control system operations to ensure compliance with policies and procedures.

B. Review of Management's Internal Control System

Management will report to this board:

1. At least once each year regarding an evaluation, which may be performed by the cooperative's independent public accountants, of the internal control system, including any needed enhancements.
2. As and if needed, regarding internal control system failures and corrective actions taken.

IV. IMPLEMENTATION AND COMPLIANCE

Implementation: Management will be responsible for implementing this policy with the intent of providing adequate internal control systems and related practices and for proposing improvements to this policy.

Compliance: The Board of Directors will review this policy at least annually to ensure its compliance. The board will hold management accountable for the effectiveness of the management control processes and practices put into place at the cooperative.

The initial policy was established by the Board of Directors at its meeting (date).

APPROVED:____________________________________

Controls for Minimizing External Risk Exposure

Cyber security is one of the most important policy and technology topics an organization must address. Critical infrastructure remains vital to personal safety, economic growth and national defense. Electric utilities and associated providers of technology and services must adopt best practices in policy and controls. These best practices should be infused into the culture of the organizations, many of which can lead to new efficiencies and innovation.

DATA PRIVACY

Because of ever-growing risks to data privacy and cyber security, government agencies—such as the Federal Energy Regulatory Commission, North American Electric Reliability Corporation and the U.S. Department of Energy and others—are expressing an increased interest in what utilities are doing to meet the following challenges:

- Integrating information technology (IT) and operational technology (OT) networks due to grid modernization and other business initiatives.
- Exposing both IT/OT networks to the Internet—either directly or indirectly, whether intended or not.
- Mitigating threats to IT and OT systems from the widespread use of mobile devices, social media platforms and easily portable USB drives, and governance protocols for using these tools in critical environments.
- Eliminating internal threats posed by disgruntled employees and human error.
- Countering recent OT threat events, such as attacks on programmable logic controllers and other control system equipment.

GOVERNANCE SECURITY OVERSIGHT

"Current utility governance and oversight plans must be adopted to meet new requirements of compliance. Senior leaders need to be able to answer some basic questions:

- How can we objectively measure the current cyber risk level within our organization?
- What is the current status and adequacy of our existing security (risk) policy and controls?
- How do we estimate and prioritize security expenditures, and what improvements do we expect from those expenditures?
- Where should responsibility within our organization rest for security policy, operations, enforcement, compliance and reporting?
- What are the responsibilities of our Board of Directors, the CEO/general manager and other senior leaders for complying with SEC disclosure requirements (if required)?" [1]

"No usable system is 100 percent secure or impenetrable. The goal of a risk-management program is to identify the risks, understand their likelihood and impact on the business, and then to put in place security controls that mitigate the risks to a level acceptable to the organization." [1]

1. "Guide to Developing a Cyber Security and Risk Mitigation Plan—Update 1," NRECA

1. IBM White Paper, IBM Corporation, August 2012

KEEPING OUTSIDERS OUT

The “Guide to Developing a Cyber Security and Risk Mitigation Plan—Update 1” prepared for NRECA’s Cooperative Research Network Smart Grid Project, stresses that “the goal of physical security is to make it as hard as possible for an adversary to gain physical access to critical infrastructure. There should at a minimum be an alert to indicate if unauthorized physical access has been gained, which would notify system administrators to take appropriate action.”

The document further emphasizes that everyone at a cooperative has a role in maintaining security. At a minimum, roles and responsibilities of the following should be addressed:

- The governing body for the security (risk) policy.
- A designated information security manager who maintains the policy and provides guidance for implementation and enforcement.
- Department managers who “own” critical cyber assets and are responsible for implementing security policy and procedures to protect those assets.
- Personnel with authorized access to critical assets who must review, provide feedback on and comply with security policy.

CYBER SECURITY THREATS AND VULNERABILITIES

“A cyber threat is any entity or circumstance that has the potential to harm an information system and, through that system, the organization’s mission and goals. A cyber vulnerability is a gap or weakness in a system’s security controls that a threat can exploit.”

“Security assessments will identify certain risks. An important part of the risk-management process is to determine the severity of each risk as a function of its impact and likelihood. A risk-management strategy strives for risk prevention where practical. It also must balance the costs and benefits of security controls. The goal is cost-effective controls that ensure acceptable risk levels for participating cooperatives and the smart grid as a whole.

“We can think of security risks as belonging to one of three main categories:

- People and policy
- Process
- Technology

“A cyber security program must be comprehensive—it is only as strong as its weakest link. Failure to develop appropriate controls in any category provides openings for attackers.”

(NOTE: The “Guide to Developing a Cyber Security and Risk Mitigation Plan—Update 1,” published as part of the NRECA Cooperative Research Network Smart Grid Demonstration Project, includes sections that describe common risks and mitigations in each category.)

RECOMMENDED SECURITY ACTIONS

One of the most important practices entails implementing layers of security. The cyber threat environment has become too complex to depend on one control for each risk—multiple mitigation techniques are required. IBM Corporation's best practices for cyber security in the electrical power sector outlined in an August 2012 white paper recommend the following:

1. **Regular security audits should include physical security and social engineering.** Technical risks are only one-third of the equation since networks are constantly changing. When new security problems are introduced, you need to find them before hackers do. Regular third-party security audits coupled with constant vulnerability assessments and scanning are the best ways to understand the complete landscape of your networks and where the weaknesses are located.
2. **Ensure all systems have anti-virus software and that all operating system and software patches are updated.** Do you know what systems you have in your networks, what software is running on them and what patch levels and configurations you have? The closer you can get to total endpoint awareness and control, the more secure your infrastructure should become.
3. **Segment sensitive systems and information.** In environments where people work with particularly sensitive information, such as operations centers or classified data centers, employees are typically given separate desktop systems for Web surfing and reading e-mail versus managing the system.
4. **Protect your networks**. Understand what resides in your networks and understand who has access. Breaches often happen in areas where intrusion prevention systems were not deployed or were not carefully monitored.
5. **Audit your Web applications**. Web application vulnerabilities continue to be a common gap targeted by attackers of every motivation and skill level. Whether a Web application was developed in-house, purchased from a software vendor or downloaded from the Internet, if it is running on one of your networks, you need to check it for vulnerabilities.
6. **Educate end-users about the risks of social engineering and implement safe Web browsing and password security practices.** Many sophisticated cyber attacks involve tricking someone to click on a malicious attachment, creating a backdoor for intrusion. For electric cooperatives, cyber security awareness remains a critical must-do so employees can change behaviors—learn how to make safe choices when using Internet-connected computers and detect when something in an e-mail seems "phishy." Savvy users who suspect that something is out of the ordinary are more likely to report something suspicious instead of ignoring it.
7. **Search for bad passwords.** Even after decades of experience, bad passwords and password policies remain a common security weakness. Constant, proactive efforts to find and strengthen employee passwords are effective ways, along with user education, to mitigate this weakness.
8. **Integrate security into every project plan.** Security must be applied to new projects from the beginning.

9. **Examine the policies of business partners.** Given cloud computing and complex outsource relationships, cooperative applications and systems may be operated by outside companies. Insider attacks can come from employees who work for business partners.
10. **Create a solid incident response plan.** Managing sophisticated, targeted attacks is an ongoing process that involves not just being able to identify that a breach has occurred, but being able to respond and investigate, learn and adapt.

ENTERPRISE RISK MANAGEMENT

Enterprise risk management (ERM) aligns strategy, people, processes, technology and knowledge with the objective of continuously improving the organization's risk-management objectives over time. The ERM process contains a structured, common, but flexible method to identify risks and risk owners, evaluate that risk and facilitate the sharing and discussion of risk-management information.

The primary objectives of the ERM process include:

1. **Reducing unacceptable performance variability.** ERM assists management with evaluating the likelihood and impact of major events, and then developing responses to either prevent those events from occurring or manage their impact if they do occur.
2. **Aligning and integrating varying views of risk management.** ERM provides a risk framework to integrate the efforts of multiple functions that are managing common risks across the organization. Risk-management efforts are also linked to strategic planning, budgeting and resource allocations.
3. **Building confidence of members, investors and other stakeholders.** ERM enables management to articulate more effectively how well they are handling existing and emerging industry issues to members, investors and other stakeholders, such as legislators or rating agencies.
4. **Enhancing corporate governance.** ERM strengthens board oversight and risk-monitoring activities, clarifies risk management roles and responsibilities, sets risk-management authorities and boundaries, and effectively communicates risk responses in support of key business objectives. All of these activities are part of effective governance, which sets the tone for understanding risks and risk-management capabilities and aligning risk appetite with the organization's opportunity-seeking behavior.

An effective ERM process includes a well-defined organizational oversight structure and assignment of accountabilities:

1. **Risk Governance:** The Board of Directors provides an oversight role, which includes setting the tone of the risk-management activities through their review and approval of the risk-management philosophy, risk appetite and risk tolerances. The board also periodically participates in a risk assessment as part of the strategic planning process and reviews the critical risks identified in addition to those from management's operational risk assessment. In addition, directors determine whether management's responses for critical business risks identified during the assessments are appropriate and review the status of ongoing risk-management efforts.

2. **Risk Executive:** The CEO/general manager or other cooperative executive serves as the "comprehensive risk executive" responsible for the ERM program. This includes approving priorities, strategies and policies as well as being the final enforcer on such matters as aligning objectives, strategies and risk appetite; eliminating gaps and overlaps in risk-management responsibilities and authorities; and resolving significant internal conflicts.
3. **Risk Management Oversight:** Executive management or a corporate Risk Committee oversees the execution of the ERM processes on behalf of the risk executive by performing the following duties:
    - Establishing and communicating the role of risk management in the organization.
    - Integrating risk management within the strategic planning process.
    - Overseeing the development and ongoing maintenance of the following ERM infrastructure elements:
        - Risk philosophy and risk appetite, subject to final approval by the Risk Committee
        - Enterprise risk framework and definitions, which serve as the common risk language for the organization
        - Strategic and operational risk assessment tools and approaches
        - Format and approach used for analyzing critical business risks
        - Tolerance rating scales
        - Risk register format and reporting
    - Proposing risk tolerance ratings for critical business risks to the Risk Committee for approval.
    - Assigning risk owners to manage and monitor critical business risks in their area of responsibility.
    - Monitoring the organization's critical business risks and the risk-management efforts through the collection and aggregation of information provided by risk owners.
4. **Risk Management Support:** A chief risk officer or risk-related function is responsible for facilitating the execution of ERM program activities through the performance of the following tasks:
    - Making changes to the ERM infrastructure elements as directed.
    - Providing leading practices information and improvement recommendations to the ERM infrastructure elements for Risk Committee review and approval.
    - Facilitating the performance of the strategic and operational risk assessments.
    - Developing measurement methodologies to ascertain the integrity of the underlying data and the reliability of reports and periodically evaluating them for effectiveness.

- Facilitating the sharing of leading risk-management practices across the organization.
- Working with risk and business process owners to continuously improve risk-management capabilities through guidance and support.
- Facilitating the initial development of the formal risk analyses and the periodic updates.
- Facilitating the development and ongoing maintenance of the risk registers.
- Periodically conducting risk management education for the Board of Directors, Audit Committee, risk owners and other employees.
- Implementing and delivering the appropriate risk reporting to the Board of Directors, risk owners and business process owners.
- Incorporating strategic and operational risk assessments results within its own risk assessment process as the basis for the development of the annual audit plan to avoid any duplication of efforts.
- Providing feedback on the design and effective operation of controls or risk-management activities for critical business risks from audits performed. This feedback should be incorporated in the ongoing evaluation of risks.
- Reviewing the basis of management's risk assessment and evaluating the adequacy and effectiveness of the risk-management activities and providing assessments to the Board of Directors and the Risk Committee.

Chief risk officer or risk-management support functions may provide the Audit Committee and the Risk Committee with recommendations on the risk appetite, tolerances and risk-management activities; however, they may not determine the organization's risk appetite and tolerances, implement and supervise risk-management activities, nor provide assurance on the ERM program.

5. **Risk Ownership:** The risk owners (typically senior management) are primarily accountable for providing assurance that the appropriate risk-management activities are in place for their assigned risks, given the risk appetite and tolerances set by the Board of Directors and Risk Committee. Risk owners also approve detailed analyses prepared and updated by the business process owners before they are provided to the Risk Committee for review.
6. **Risk Management Process Owners:** The business process owners are responsible for conducting risk-management activities on a daily basis by maintaining effective mitigation controls and monitoring, promoting risk awareness to their staff, and aligning their risk priorities and tolerances with those of the organization. They also identify and measure risks and assign the risk-management responsibilities and accountabilities to key managers as necessary. Business process owners prepare the detailed risk analyses and update them periodically in coordination with the risk-management function and provide them to the appropriate risk owner for review.

ADDITIONAL RESOURCES

- *Guidance on Enterprise Risk Management-Enterprise Risk Management Integrated Framework, 2004, issued by the Committee of Sponsoring Organizations: www.coso.org/Pages/guidance.aspx*
- *American Society of CPAs: www.AICPA.org*
- *Risk Management Society: www.RIMS.org*

Definitions for Key ERM Terms

- *Risk-Management Philosophy* represents the shared beliefs and attitudes characterizing how an organization considers risk in all activities. It reflects the organization's values, influencing its culture and operating style, and affects how the ERM process is applied, including how risks are identified, the kinds of risks accepted and how they are managed.
- *Risk Appetite* is the amount of risk, on a broad level, an organization is willing to accept in pursuit of its values. It reflects the organization's risk-management philosophy and, in turn, influences the organization's culture and operating style. The corporate strategy should be aligned with the risk appetite, which is expressed in principle.
- *Risk Assessment* allows the organization to consider the extent to which potential events have an impact on achievement of objectives. Events are assessed based on their likelihood and impact.
- *Risk Tolerances* are the acceptable variations relative to the achievement of objectives. Risk tolerances can be measured, and often are best measured in the same units as the related objectives.

COOPERATIVE BOARD POLICY TEMPLATE

EXHIBIT 15A

SUBJECT: COOPERATIVE RISK MANAGEMENT

I. PURPOSE

To set forth policy and commitment for ensuring that enterprise risk management (ERM) becomes an integral part of the cooperative's operating and information systems.

II. POLICY

It is the policy of the Board of Directors that the cooperative will identify and manage its enterprise risks in support of its vision, mission, values and goals as set out in the strategic plan and in all aspects of its operations. The board recognizes that while it cannot eliminate risk, it will endeavor to ensure that existing and emerging risks, including cyber security threats and breaches, are identified and managed within acceptable risk tolerances and in accordance with all applicable laws and regulations.

III. EXPECTATION

The board recognizes that effective ERM remains a shared responsibility of the board and management. The board assumes responsibility for enforcing risk management and compliance requirements and for ensuring that such requirements are incorporated into the culture and strategic decision-making of the cooperative.

IV. IMPLEMENTATION AND COMPLIANCE

Implementation: The CEO/general manager is accountable for implementing the cooperative's overall ERM policy and related strategies and processes and for the establishment of key risk indicators that will be monitored on a regular basis.

Compliance: The Board of Directors is responsible for ensuring that the cooperative's ERM policy, processes and protocols are within acceptable tolerance limits. The Board of Directors periodically reviews and approves the cooperative's risk-management philosophy, risk appetite and tolerances for individual risks, which serve as the foundation of the ERM program. The Board of Directors reviews the significant business risks identified and prioritized by management and provides oversight with respect to the activities performed by staff to manage these risks. The Board of Directors also reviews the status of risk-management activities for significant business risks.

The initial policy was established by the Board of Directors at its meeting (date).

APPROVED: ____

Adjusting Electric Rates for an Evolving Utility Landscape

Determining electric rates remains one of the most important responsibilities of any electric cooperative board of directors/trustees. Rates need to not only cover both operating and capital costs, but also send critical pricing messages to members regarding the value of electricity.

To accomplish this, directors/trustees need to adopt an overall rate strategy that marries three specific policies. Rates then must be designed to provide positive feedback and reinforce these policies.

1. Financial Strategy and Equity Policy

Alignment of rates with an electric cooperative's financial strategy policy remains paramount. This means a cooperative must have a strategy (a financial plan) and equity management plan that define long-term income and balance sheet objectives for the following:

- A desired margin defined by financial metrics such as TIER, DSC, rate of return on rate base and rate of return on equity to establish the cooperative's financial performance and revenue requirements in the future.
- An equity level.
- Cash requirements (liquidity).
- Capital credits retirement policy.

2. Rate Design Policy

A fundamental part of rate design involves determining annual revenue requirements—or the minimum income needed to properly conduct the cooperative's business and meet its financial goals. However, stagnant electric demand, rising costs and challenges from disruptive technologies carry profound impacts on electric cooperatives using traditional rate structures.

Revenue requirements must be sufficient to:

- Recover the cooperative's operating and maintenance expenses, including power costs, interest on debt and working capital requirements, and
- Achieve the cooperative's equity goals, including return of capital credits and other financial targets.

Ideally, electric cooperative rate design also must be cost-based. Cost-based rates generally refer to the allocation of revenue to rate classes based on a cost-of-service study, whereby rates of return are equalized across classes. Cost-based rates reflect a pricing structure whereby members in each rate class—such as residential, commercial and industrial—pay their fair share of the cooperative's costs, which minimizes one class subsidizing another.

In practice, cost-based rates are difficult to achieve. Sometimes cooperative directors/trustees and staff assume that because the cooperative recovers costs and meets financial goals, it has implemented cost-based rates. While recovering costs and meeting financial goals are important objectives for any rate plan, the way costs are recovered influences whether the rates are, in fact, cost-based.

As an electric cooperative's board and management begin discussing rate philosophy, the following elements regarding rates should drive discussion:

- Be easily understood by members.
- Provide required revenue.
- Ensure revenue stability from year to year.
- Be cost-based and provide a fair apportionment of costs to consumers served.
- Send proper pricing signals reflecting how costs are incurred.
- Not be unduly discriminatory.

Of course, all of these requirements pose many questions: What constitutes a fair apportionment of costs? What is the appropriate way to ascertain undue discrimination? What are allowable differences in relative margins (returns) between rate classes? For rate classifications with a metric above or below the allowable difference, how do you mitigate rates to an acceptable level? What are the maximum allowable rate increases relative to system average? Should a rate class ever receive a rate decrease? How should a rate class with minimum investment be evaluated? Should impacts on low-income consumers be considered? To what extent should the full cost component in the customer or facility charge be recovered and what is the plan to reach the target goal?

The answers will differ from cooperative to cooperative but are critical elements of any rate design policy.

3. Distribution System Operator Policy

Historically, electric distribution cooperatives have served as an energy aggregator and interface between retail consumers and wholesale power suppliers—generation and transmission cooperatives, investor-owned utilities or federal power marketing administrations. As wholesale power markets have evolved, wholesale suppliers have adapted. Today, two-thirds of the electricity consumed in the United States is delivered in service areas with organized wholesale electric markets.

Electric distribution cooperatives need to plan for ongoing changes, particularly the integration of distributed energy resources (DERs) and associated operational and safety issues; AMI and microgrid deployment; and the possible transition from a radial distribution system to an intelligent one.

Given that cooperative consumers are increasingly able to provide services to the distribution cooperative through DERs and personal energy management applications, the cooperative needs to consider rates and pricing for these functions.

TRADITIONAL ELECTRIC RATE DESIGN

Costs are imposed on an electric utility network by three means: being a customer (consumer-member); incurring demand; and using energy.

1. Customer costs: Consumer-related costs like a meter, meter pan, service drop and billing.

2. Demand costs: Investment in generation, transmission and distribution facilities of adequate size to meet peak demand.
3. Energy costs: Fuel costs and variable O&M costs based on electric use.

Despite three categories of costs, most cooperatives employ a two-part rate design for residential and other low-voltage (nonindustrial) members consisting of a customer charge and an energy charge. This is because it has not been cost-effective to meter the demand component of smaller consumers. Large users, such as factories, mines, poultry farms, etc., are typically billed with three-part rates (fixed customer charge, demand charge and energy charge), which rely on meters capable of measuring both demand and energy.

Typically, the customer charge does not reflect the full amount of fixed costs involved in serving an individual consumer, while the energy charge contains a combination of fixed costs as well as variable energy-related costs.

A traditional rate design that recovers a significant portion of fixed costs and margins through the energy charge may result in higher-use consumers paying a disproportionately higher share of fixed costs. Additionally, if costs rise and/or kWh sales decline, a cooperative can lose money because an element of fixed costs goes unrecovered.

To solve this problem, most distribution cooperatives raise rates to reflect cost increases and/or forgo collection of some fixed costs with the hope that kWh sales will bounce back. But this approach often requires frequent rate hikes to collect enough revenue to cover costs—and demand may not bounce back as quickly.

Two ways of addressing this concern, at least on a partial or temporary basis, under a two-part rate design include:

1. Taking non-energy-related costs (i.e., fixed costs) and margins out of the energy charge and placing them in the customer charge.
2. Decoupling revenue from kilowatt-hour sales through a formulary rate plan, where revenue is "trued-up" on a periodic basis using an automatic rate adjustment, or formula. This results in a cooperative's financial performance more closely tracking its target levels even if kWh sales increase or decrease.

A third, and potentially better way, of addressing the mismatch with two-part rates entails moving to three-part rates—a structure made possible by technology, notably AMI. Any transition to three-part rates will take time and necessitate a concerted consumer education effort. Decoupling revenue from kWh sales offers one solution to any losses resulting from the shift to three-part rates.

RATE DESIGN CONSIDERATIONS

While rate structures should collect revenue requirements as fairly as possible, in reality rates for energy, demand and consumer components rarely reflect true costs. The industry-wide slowdown in kWh sales since 2008 has had a noticeable effect on revenue, indicating an overstated energy component in how most rates are put together.

Cost-of-service analyses suggest that electric consumers incur costs three separate ways:

1. Consumer-related facility costs for billing, meters and maintenance of the distribution system (lines, poles, etc.);
2. Demand-related costs tied to providing capacity to deliver power; and
3. Energy costs connected to fuel and variable O&M associated with generation.

Thanks to AMI and various distribution automation devices, electric cooperatives can effectively modify traditional rate structures. More dynamic rate designs, like time-of-use rates or critical peak pricing, can be implemented once embedded costs are fully identified and accounted for.

As consumer-owned DERs become more commonplace, two basic rate structures stand out in reflecting the actual costs of distributing electricity:

1. A two-part rate that aligns fixed costs with a fixed charge (customer component) and variable costs with an energy charge.
2. A three-part rate appropriate to the consumer's size and delivery voltage.

TWO-PART RATE WITH A HIGHER CUSTOMER CHARGE

Fully aligning fixed costs with a fixed charge and variable costs with the energy charge collects consumer and demand costs in the customer charge, leaving only fuel and variable O&M in the energy charge.

On a distribution system, fixed costs are incurred regardless of how much electricity a member uses. Under traditional practice, energy costs frequently contain fixed costs since electric cooperatives purchase wholesale power at set rates under contract. Further, distribution cooperatives collect fixed costs (demand and customer) in the energy component.

However, if purchased power and distribution rates are designed based on cost-of-service principles, energy costs would contain fuel and variable O&M—true energy costs—with no fixed costs rolled in. The customer (fixed) charge, in turn, will accurately show the capital-intensive nature of electric service—the investment made before a member can be served.

Over the decades, electric cooperatives have not included all fixed costs in a customer charge because rates were structured for a rising kWh sales environment. Also, because cooperatives serve fewer consumers per mile of line, rolling in fixed costs leads to a much higher customer charge—certainly in comparison with neighboring investor-owned utilities, a disparity that can pose competitive and/or member issues. Of course, raising the customer charge decreases the energy charge, since the total amount collected will be the same.

In the end, placing all fixed costs in the customer charge fashions a much fairer and balanced collection of revenue from all members—the primary goal of rate design.

Consider it this way: An electric distribution system resembles equipment rental. If you rent an item for just a few hours, then the cost per hour is quite high compared with renting it for several days. So if a member rents the cooperative's equipment (demand and consumer-related costs) and uses it for a relatively few hours (low load factor), the cost per kWh will be high. Likewise, a member who uses the equipment for a long time (high load factor) will see a lower price per kWh.

Other capital-intensive industries, such as cable TV and cell phone businesses, use this type of rate structure. In addition, this rate is very consistent with short-run marginal costs. Marginal costs have been suggested as a pricing method by academics and certain regulators in the utility industry for decades as a means of addressing both equity and efficiency concerns not generally addressed by embedded costs.

THREE-PART RATES

Three-part rates provide for an efficient, and more accurate, means of billing for electric service. Costs are created by consumers being connected to a grid, placing demand on the system and using energy. By assigning cost components to where they belong (customer, demand or energy) and charging the actual cost for each, a cooperative transmits proper price signals that enable members to make wiser choices on how and when to consume electricity.

Electric cooperatives have traditionally hesitated to adopt this method for all rate classes since residential consumers are almost universally charged a two-part rate (customer charge and energy charge) and typically (unlike commercial and industrial accounts) have no understanding of demand or a demand rate. This means switching to a three-part rate likely requires a major, ongoing education effort since the topic can be difficult for the average consumer to grasp quickly.

In addition, three-part rates may attract opposition from energy efficiency and demand-response supporters, as the structure could undercut consumer incentives to invest in distributed generation resources. At the same time, however, three-part rates draw less ire from low-income advocates since they do not shift costs to low-income members who use little power.

ADDITIONAL RESOURCES

- *CFC's complimentary value-added member services include professional rate analyses and cost-of-service studies. Contact your CFC regional vice president or associate vice president for more information.*
- *Retail Rate Guide Vols. I and II (2017), CFC and NRECA*
- *Communicating Rate Changes: Ways to Build Internal and External Support (2015), CFC*
- *Electric Rate Concepts in an Era of Slow Growth (2013), CFC*
- *Meeting DG Challenges: Ratemaking Philosophies and Strategies for Electric Cooperatives to Consider (2016), CFC*
- *·Rate Strategies for 21st Century Challenges: A Guide to Rate Innovation for Cooperatives (2010), NRECA and CFC*

- *Setting Rates (This series of CFC Solutions News Bulletin inserts published form 2007 to 2009 examines how electric cooperatives can apply best practices when setting rates for their members.)*
  - *Part 1: Introduction to Best Practices in Rate Setting*
  - *Part 2: Load Research–Determining Power and Energy Demand Causation to Allocate Service Costs*
  - *Part 3: A Brief History of Electric Cooperative Rate Setting*
  - *Part 4: Methodologies for Determining Revenue Requirements*
  - *Part 5: Embedded Cost of Service: An Overview of the Analysis*

COOPERATIVE BOARD POLICY TEMPLATE

EXHIBIT 16A

SUBJECT: ADJUSTMENTS TO RETAIL ELECTRIC RATES

I. PURPOSE

To set forth policy relating to the setting of retail electric rates for the cooperative.

II. POLICY

The Board of Directors desires to offer reliable electric service to members at the lowest possible cost while maintaining strong financial stewardship. This entails striking a balance between keeping electric rates reasonable while ensuring the financial health and well-being of the cooperative and complying with financial commitments to its business partners.

III. EXPECTATION

When long-range financial planning indicates the need for management and the Board of Directors to consider an adjustment in electric rates, the cooperative shall use the following procedure to determine the appropriate timing, rate structure, tariff and schedule for implementation:

- Upon identifying the future need for rate adjustments to support financial objectives of the cooperative, the CEO/general manager will recommend initiation of a rate study to the board of directors/trustees.
- The cooperative, with input from qualified and expert consultants, shall complete a detailed revenue requirements study to identify the projected incremental revenue necessary to achieve financial objectives. A cost-of-service study (COSS) will also be completed to identify appropriate membership rate classes and design a fair and reasonable allocation of costs and revenue across those rate classes, with consideration to the redesign of rate structures as may be deemed appropriate.
- The board will review and approve the proposed rate classes and rate (tariff) structure and will schedule at least one meeting for presentation and discussion of the rate plan with the membership. Details of the rate adjustment and schedule for hearing(s) will be appropriately communicated to the membership.
- After receiving membership concerns/comments, the board will act to either amend the rate adjustment or approve the change effective at a specific date openly communicated to the membership.

IV. IMPLEMENTATION AND COMPLIANCE

Implementation Responsibility: The CEO/general manager will be held accountable for implementation of rate schedules approved by the Board of Directors.

Compliance Responsibility: The Board of Directors will review this policy to ensure it remains relevant to the cooperative's financial posture, and that the policy and related rate schedules meet compliance requirements for operating as a not-for-profit organization.

The initial policy was established by the Board of Directors at its meeting (date).

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We hope you find this guide—and other CFC member publications—as useful and interesting as we find the process of creating them. Decades of real-world cooperative experience and proven best practices are contained in this volume and its predecessor. In other words, the successes that derive from these pages belong to the electric cooperative community. We learn from one another and make each other strong. As always, please share your thoughts, suggestions and questions with us. CFC is here to serve our member-owners.

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