CRITERIA TO EVALUATE OPERATIONS, MAINTENANCE, AND MANAGEMENT SYSTEMS FOR RURAL UTILITIES

DISCUSSION DRAFT PREPARED
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ASSUMPTIONS

Criteria must be measurable
Criteria must be related to goals
Criteria must be applicable to all types of utilities
Criteria must be applicable for communities and utilities with widely differing circumstances
Criteria must be general enough to work for different stakeholders who place different emphasis on goals
Criteria must be simple
Criteria must be limited in number

GOAL 1. PROVIDE AN APPROPRIATE LEVEL AND QUALITY OF SERVICE

PRINCIPLES

SERVICE STANDARDS
Well established standards for measuring the quality of utility service are available for all types of utilities

IMPOSED STANDARDS
Some operational standards are imposed from outside the community by state or federal government
These standards may place some restrictions on the options available to the local utility
**OBJECTIVES**

( measurable)

**MAINTAIN APPROPRIATE INTERNAL OPERATIONAL STANDARDS**

1. **inventory management**
   - planned inventory levels maintained

2. **plant and equipment maintenance**
   - maintenance based on manufacturer guidelines

3. **training**
   - ???

4. **financial, operational, and administrative record keeping**
   - ???

5. **other**
   - ???

**PROVIDE APPROPRIATE SERVICE LEVEL**

2. **hours of operation**

**PROVIDE RELIABLE SERVICE**

3. **hours of unanticipated unavailability of service**

**PROVIDE CONSISTENT SERVICE**

4. **hours of service below minimum quality standard**

**MINIMIZE HEALTH RELATED IMPACTS OF SERVICE**

4. **incidence of disease related to service delivery or service**

**MINIMIZE ADVERSE ENVIRONMENTAL IMPACTS OF SERVICE**

5. **incidence of environmental impacts related to service delivery**

**MINIMIZE SAFETY HAZARDS**

6. **hours of work lost to injury**

**MAINTAIN ADEQUATE TECHNICAL RESOURCES**

7. **???**

**MAINTAIN ADEQUATE ADMINISTRATIVE AND MANAGERIAL RESOURCES**

8. **???**

**MAINTAIN ADEQUATE RESOURCES FOR CONTINGENCIES**

9. **???**

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**GOAL 2. MINIMIZE THE COST OF SERVICE DELIVERY**

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PRINCIPLES

OPPORTUNITY COST
The utility should use relatively more of resources that have a low opportunity cost, and less of resources with a high opportunity cost.

Properly measured the cost of a resource used in a rural utility is the highest value that resource could generate in another use.

The price of a resource generally reflects opportunity cost.

These resources, available in varying amounts in different communities, include available cash, grants, local labor, technical and managerial skills, technical assistance and political capital.

In rural Alaska available cash and technical and managerial skills are in short supply. Labor, political capital, grants and technical assistance are in relatively greater supply.

LIFE CYCLE COST
Cost includes all cost elements over the entire project life. This includes operating cost decisions as well as capital expenditures.

INTERNALIZE EXTERNALITIES
Cost includes external benefits and costs as well as those internal to the utility, (such as heating, sewer, cooking, water.)

OBJECTIVES

1. MAINTAIN APPROPRIATE FINANCIAL CONTROLS FOR OPERATIONS
   - annual external audit

2. PROVIDE ADEQUATE RESERVES FOR EQUIPMENT DEPRECIATION
   - reserve balance

3. MINIMIZE FUEL COSTS
   - cost of fuel per unit of service

4. MINIMIZE OPERATING COSTS—BY OBJECT
   - PURCHASED SUPPLIES AND EQUIPMENT
     - cost per unit of service
   - LABOR—WAGES AND OTHER EMPLOYMENT RELATED COSTS
     - cost per unit of service
   - ADMINISTRATION
     - cost per unit of service
   - OTHER OPERATIONS
     - annualized cost per unit of service

5. MINIMIZE CAPITAL COSTS
   - annualized cost per unit of service

6. STABILIZE REVENUE GENERATION
   - annual variance between revenues and expenditures

CRITERIA

(quantifiable)

- Performance measures
### GOAL 3. MAXIMIZE COMMUNITY CONTROL

#### PRINCIPLES

COMMUNITY OWNERSHIP

A sense of ownership contributes to quality, responsive, and cost effective service.

Control enhances a sense of ownership.

#### OBJECTIVES

(enumerated, measurable)

1. MAINTAIN CLEAR ASSIGNMENT OF OPERATIONAL RESPONSIBILITY
   - complete job descriptions
2. MAINTAIN CLEAR ASSIGNMENT OF DECISION MAKING AUTHORITY
   - complete organizational guidelines (bylaws, etc.)
3. MAINTAIN OPEN AND INCLUSIVE POLICY DECISION MAKING PROCESS
   - written minutes of policy meetings
4. IDENTIFY DISTRIBUTION OF BENEFITS AND COSTS OF POLICY DECISIONS
   - written summary of policy decision effects precede decisions

### GOAL 4. ENHANCE COMMUNITY SUSTAINABILITY

#### PRINCIPLES

COMMUNITY STEWARDSHIP

Utilities are a community resource that can be used to advance community objectives

#### OBJECTIVES

(enumerated, measurable)

#### CRITERIA

Performance measures

1 SHARE RESOURCES WITH OTHER COMMUNITY ENTITIES

2 BE RESPONSIVE TO OPPORTUNITIES AND CONSTRAINTS

3 ALLOCATE COSTS CONSISTENTLY WITH DEVELOPMENT OBJECTIVES

4 CONTRIBUTE TO ECONOMIC BASE OF COMMUNITY

5 DEVELOP LOCAL HUMAN CAPITAL

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maintain strategic plan

maintain clear rate structure

amount of local purchase of supplies, equipment, and labor

number of residents employed