Low-Income CIP Spending Requirements

Regulatory and Policy Analysis for COUs
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We also want to thank the CARD project manager, Laura Silver, for her assistance and guidance. Her comprehensive understanding of the CIP and LI CIP programs and her commitment to this project were essential to ensuring that the project reports furnish accurate information about the low-income programs and address important issues for improving the efficiency and effectiveness of low-income programs in the future.

DISCLAIMER

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Acronyms

CAP – Community Action Partnership

CIP – Conservation Improvement Program

COU – Community-Owned Utility

Department – the Minnesota Department of Commerce

EAP – Energy Assistance Program

EM&V – Evaluation, Measurement and Verification

ERR – Energy Related Repair

ESP – Energy Savings Platform

FFY – Federal Fiscal Year

HHS – United States Department of Health and Human Services

LI – Low Income

LI-CIP – Low-Income Conservation Improvement Program

LIHEAP – Low income Home Energy Assistance program

LIRC – Low Income Rental Certification

NEAT – National Energy Audit Tool

WAP – Weatherization Assistance Program

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Executive Summary

The purpose of this study is to help the Department of Commerce (Department) to identify priorities, consider alternatives, and develop initiatives for increasing the efficiency and effectiveness of the low-income (LI) programs implemented by the utilities as part of their Conservation Improvement Program (CIP) responsibilities. The study examined ways to make Department policies clearer and more consistent, to develop guidance that would improve the quality of low-income program service delivery, and to identify opportunities for enhanced collaboration between publicly-funded and ratepayer-funded programs. The initiatives identified through this study must be consistent with the Department's CIP regulatory authority and ideally would engage all interested parties in a collaborative process for building consensus on program improvements.

The purpose of this report is to furnish the study findings and recommendations. The report is designed to complement the information contained in the report titled *Low-Income CIP Program Assessment – Process Evaluation of COU Programs* that reviewed the design and implementation of COU low-income programs and the performance of those programs. This report focuses on policies and procedures for natural gas and electric Community Owned Utilities (COUs) which consist of cooperatives and municipal utilities. A companion report furnishes information on policies and procedures for Investor Owned Utilities (IOUs).

Regulatory Framework for Low-Income Programs

The components of the regulatory framework for the CIP low-income spending requirement are Statutes, Rules, Regulatory Decisions and Orders, and communications, instructions, and guidance documents published by the Department. The utilities use this set of information to develop Plans and file Status Reports that they perceive are consistent with policies and procedures. The Department uses this set of information to review the Plans and Status Reports and to assess whether a utility's programs fulfill the low-income spending requirements.

In our review, we examined these components of the CIP regulatory framework for language and material related to low-income CIP programming. We identified ways in which each component of the framework supports the development of effective low-income programs or presents barriers to the development of effective low-income programs. We also considered how a fresh interpretation of language and updates to guidance might allow the Department to improve the quality of low-income CIP programming. Findings include:

- Statute – The analysis found that there is one barrier to effective program implementation and one opportunity that is not currently utilized by the COUs.
    - The statute does not define the term "low-income persons" and does not define what it means for a program "to directly serve the needs of low-income persons…" This leads to some ambiguity with respect to determining utility spending towards the low-income spending requirement.

    - The statute allows for generation and transmission cooperatives, municipal power authorities, and other nonprofit entities to take responsibility for meeting the low-income spending requirements for member COUs in aggregate. Using this statutory authority could help to resolve problems that some COUs have in fulfilling the spending requirement.

- Rules – The Rules regulate IOU CIP program reporting and the Department's review of those report filings. While the Rules are a major component of the CIP regulatory framework, they do not apply to COUs.
- Commissioner's Orders/Decisions – The Commissioner periodically issues Orders in the context of Plan and Status Report filings that have the effect of appearing to set LI CIP policy. However, these Commissioner Orders do not always articulate a consistent policy and this leads to a lack of clarity.
- Department Guidance – The Department has issued a number important guidance documents, some of which were relevant to all utilities and others that were focused on COUs. These guidance documents are valuable to the COUs because they furnish clear information on program requirements and opportunities. The guidance for electric utilities on counting energy savings from delivered fuel energy efficiency measures was particularly useful to rural COUs. The positive outcomes resulting from issuance of these guidance documents suggest that this is an effective way for the Department to set policy.
- Other Relevant Communication – The Department's systems for documenting and disseminating information communicated to IOUs in other ways is comparatively weak and makes it difficult for the Department to develop consistent policies and to communicate those policies to all COUs. For example, in our in-depth interviews, some COUs reported that the Department had instructed them that certain program measures would not count as low-income spending (e.g., installation of measures in common areas in Section 8 housing) while other COUs reported that they had installed those measures and counted them toward their low-income spending requirement.
- Instructions - The Department has issued instructions and guidelines for COUs in reporting their CIP activities and plans. The Department has also invested in an online tool to facilitate reporting and analysis. Some of the COU aggregators and COUs recommended that the Department give the COUs more flexibility in the planning and reporting periods.

Analysis of COU reports finds that some COUs meet their spending requirements with dedicated low-income programs, some meet their spending requirements only if residential program spending on low-income customers is included, and that some COUs fail to meet their spending requirements. Since all interviewed aggregators and COUs indicated an intention to fulfill low-income spending requirements with dedicated low-income programs, this study attempted to identify potential changes to policies and procedures that could help COUs to fulfill those requirements.

Policies and Procedures for Spending Requirements

The different elements of the regulatory framework come together to define the policies and procedures that the Department has established to ensure that utilities fulfill the statutory requirements with respect to the low-income spending requirement. Those policies and procedures include:

- Low-Income Spending Requirement Amount - Each year, electric and gas utilities and associations are required to spend a specified percentage of their three-year average residential gross operating revenue (GOR) on low-income programs.
- Qualified Low-Income Spending - COUs are required to spend the specified amount on programs that "directly address the needs of low-income persons, including low-income renters."
- Planning and Reporting Requirements – Each year, COUs are required to file prospective Annual Plans for the next year and retrospective Status Reports for the prior year through the Energy Savings Platform (ESP).
- Compliance - Department staff review all COU Plans and Status Reports for compliance with low-income program guidelines and the low-income spending requirements, and publish a Decision letter summarizing the Commissioner's findings.

To ensure that the utilities meet the CIP low-income spending requirement, the Department defines required spending amounts, furnishes guidelines on programs that can be counted toward the spending requirement, reviews Plans and Status Reports for compliance, and issues findings related to compliance.

There are some ambiguities in the current policies and procedures that lead to some uncertainty for Department staff and IOU program managers. The outstanding issues include:

- Spending Requirements – Commissioner COU Decision letters indicate that, while the Department prefers that COUs fulfill their low-income spending requirement with spending on dedicated low-income programs, it is acceptable for COUs to fulfill the requirement with spending on dedicated low-income and estimated low-income spending in residential programs. No action is taken when a COU fails to meet their low-income spending requirement.
- Building Owner Contributions – There is no standard policy for the amount that an owner of a low-income building is expected to contribute to program costs. At the current time, similar programs have different guidelines for owner contributions.
- Reporting on Low-Income Customers and Renters – The ESP requires COUs to estimate the percentage of customers that participate in each residential program that are low-income. The ESP does not ask COUs to report on the number of renters participating in either low-income or residential programs.

Addressing some of these issues might increase the amount that COUs spend on dedicated low-income programs and might increase the effectiveness of the programs.

Low-Income Program Design and Implementation Guidelines

Many state and local jurisdictions have implemented ratepayer-funded programs. In some jurisdictions regulators furnish detailed guidance on the design and implementation of low-income programs while others have delegated that responsibility to the organization(s) that is (are) responsible for program implementation. With respect to programs implemented to meet the CIP low-income spending requirement, on most issues related to program design and implementation, the Department has furnished recommendations to the utilities, but allows each utility to design and implement a program that the utility perceives best meets the needs of their low-income customers. On certain issues, the Department has taken a more active role in working with the utilities, services providers, and other interested parties to develop the program guidelines.

The following summarizes the level of guidance that the Department has furnished in important areas of program design and implementation.

- Definition of Low-Income - The statute does not define low-income. The Department has given the utilities flexibility in specifying which customers are counted as low-income.
- Income Verification - The Department developed a combined EAP/WAP/CIP application form and procedure that allows intake agencies to determine a household's eligibility for each of the three programs.
- Coordination with Publicly-Funded Programs (WAP and EAP) - The Department has encouraged utilities to collaborate with WAP service providers on low-income programs. However, in compliance reviews, the Department does not comment on whether the utility collaborates with WAP service providers.
- Identification of Eligible Buildings - The Department has not developed comprehensive guidance on what types of buildings are eligible for CIP low-income programs. However, some COUs reported that they find some Department decisions on eligible buildings have been a barrier to meeting program spending requirements.
- Identification of Eligible Energy Efficiency Measures - The Department has not furnished utilities with a comprehensive list of measures that are eligible for CIP low-income programs. However, some COUs reported that they find some Department decisions on eligible measures have been a barrier to meeting program spending requirements.
- Health and Safety Protocols and Allowable Measures – One important challenge for low-income programs is that many low-income housing units have health and safety problems that present barriers to the installation of a comprehensive set of energy efficiency measures.[1] The

[1] DOE's Weatherization Program Guidance 11-06 identifies health and safety actions are those actions necessary to maintain the physical well-being of both the occupants and/or weatherization workers where: costs are reasonable as determined by DOE and the actions must be taken to effectively perform weatherization work or the actions are necessary as a result of weatherization work.

Department has specified assessment protocols and measure installation guidelines for the WAP and EAPWX programs. However, the Department has not established a consistent set of procedures that COU low-income programs can follow with respect to health and safety.

- Specification of Quality Control Procedures - The Department has not furnished detailed specifications for quality control procedures for CIP low-income programs. The Department has specified quality control procedures for the WAP and EAPWX programs. However, the Department has not established a consistent set of procedures that COU low-income CIP programs can follow with respect to quality control.
- Measurement and Verification (M&V) of Energy Savings - The Department has developed the Minnesota Technical Reference Manual as the default source of energy savings calculations for CIP, including low-income programs. The Department has not specified COU M&V procedures. However, many jurisdictions exempt COUs from those requirements because they have relatively small program budgets.
- Evaluation of Program Process and Impacts - The Department has worked collaboratively with utilities, other program partners, and interested parties to study issues related to low-income programs. The Department has used the CARD grant mechanism to study both program opportunities and program effectiveness. However, the Department has not specified COU evaluation procedures. However, many jurisdictions exempt COUs from those requirements because they have relatively small program budgets.

The Department's general policy on setting guidelines for low-income programs has been to make recommendations, but to allow individual utilities to select alternatives that they perceive to be effective for their organization and low-income customers. We find that this leads to some inconsistencies in the way that different COU programs are implemented and some uncertainty about whether the Department has identified best practices that should be implemented in all COU programs.

Recommendations

Our assessment of the COU low-income programs has found that COUs have implemented a diverse array of low-income programs. In some cases, the WAP service provider working with the COU has worked proactively with the COU to identify opportunities for the COUs to serve their low-income customers. In other cases, the COU has identified some innovative ways to serve low-income customers and low-income communities. The COU Low-Income Program Assessment Report furnishes more detailed information about the specific programs that have been implemented.

This analysis finds that the Department can work with COUs to increase the effectiveness and efficiency of COU low-income programs in the following ways.

- Compliance and Flexibility – The interviews with the COU aggregators and COUs found that the COUs intend to meet the low-income spending requirement. In that context, the Department can hold COUs responsible for meeting their low-income spending requirement if it considers adding some flexibility to the requirements, including:

    - Giving the COU more flexibility in what is considered low-income spending (e.g., common area lighting for Section 8 housing, early retirement of inefficient appliances, delivering services to community organizations that target low-income households).
    - Allowing the COU to carry-forward excess low-income spending from one year to count toward the low-income spending requirement for the next.
    - Allowing the COU, at its option, to develop a three-year spending plan that would allow the COU to focus staff time on low-income programs more effectively.
- Partnership – The aggregators and COUs would like the Department to take a more active role in helping to ensure that WAP service delivery agencies meet their commitments to deliver COU services. At the same time the WAP service delivery agencies would like the Department to help the COUs to understand the full cost of delivering services in collaboration with WAP.
- Information Dissemination – The aggregators and the COUs think that it is important for them to hear about the successful program models implemented by other COUs so that they can consider replication. Examples from this study that might be appropriate include SEMCAC's work with the Dairyland Power Coop members, Moorhead Public Service's partnership with West Central CAP where the CAP identifies the needed appliances and the utility arranges for their delivery, and the Alexandria Light & Power program that works with their local Habitat for Humanity affiliate.
- Program Collaboration – The aggregators and the COUs should be made aware of the EAP Energy Related Repair (ERR) program and the EAP Proactive A16 program. Both of those programs deliver services to low-income customers of COUs and there are ways that the COU could adapt their low-income programs to enhance the services offered by those EAP programs.

In addition to encouraging COUs to undertake the initiatives outlined above, it also will be important for the Department to alert the COUs of recommended policies and procedures that are developed from recommended initiatives with the IOUs. These include:

- Develop a set of health and safety assessment protocols for all LI CIP programs.
- Specify a set of quality control procedures for all LI CIP programs.
- Identify which WAP protocols should and should not be adopted by comprehensive LI CIP programs that serve housing units in buildings with 1-4 units.

It is not clear whether and when the Department might engage in the listed initiatives with IOUs. But, if they do, it would be appropriate to invite the COU generation and transmission associations and municipal power agencies to participate in those discussions since many of those organizations support the COUs in the development of their low-income program portfolios. And, if there are outputs from those initiatives in terms of policies and/or procedures, it would be important to find an effective way to disseminate those to COUs and their serviced providers.

1.0 Introduction

The purpose of this study is to help the Department of Commerce (Department) to identify priorities, consider alternatives, and develop initiatives for increasing the efficiency and effectiveness of the low-income (LI) programs implemented by the utilities as part of their Conservation Improvement Program (CIP) responsibilities. The study examined ways to make Department policies clearer and more consistent, to develop guidance that would improve the quality of low-income program service delivery, and to identify opportunities for enhanced collaboration between publicly-funded and ratepayer-funded programs. The initiatives identified through this study must be consistent with the Department's CIP regulatory authority and ideally would engage all interested parties in a collaborative process for building consensus on program improvements.

To complete this study the project team developed an in-depth understanding of the CIP low-income program requirements and how the current set of low-income programs fulfill those requirements. The research examined the following issues.

- Regulatory Framework – What are the components of the regulatory framework that define Department responsibilities and through which the Department fulfills its responsibilities?
- Changes in LI CIP Policies and Procedures – In what ways has the regulation of LI CIP changed in recent years? What do those changes tell us about the most effective ways for implementing change in LI CIP policies and procedures?
- Current Policies and Procedures – What are the current set of policies and procedures governing LI CIP? Are there inconsistencies in the way that different programs are treated under the current set of policies and procedures? Are there ambiguities about required policies and procedures under the current regulatory framework?
- Comparison with Other Jurisdictions – What types of policies and procedures have been implemented by other jurisdictions related to low-income energy efficiency programs? How does that compare to the Minnesota regulatory framework? Why might the Department consider adopting certain policies and procedures?

Using the findings from this analysis the project team identified potential changes to policies and procedures that might result in improved efficiency and effectiveness of the COU low-income programs. In addition, the project team developed recommendations for how the different Department units each could contribute to more effective communication of these policies and procedures and could support collaboration among programs that serve low-income households.

The purpose of this report is to furnish the study findings and recommendations. The report is designed to complement the information contained in the report titled *Low-Income CIP Program Assessment – Process Evaluation of COU Programs* that reviewed the design and implementation of COU low-income programs and the performance of those programs. This report focuses on policies and procedures for natural gas and electric Community Owned Utilities (COUs) which consist of cooperatives and municipal utilities. A companion report furnishes information on policies and procedures for Investor Owned Utilities (IOUs).

1.1 Methodology

This study required the project team to develop a comprehensive understanding of the regulatory framework that guides the development of LI CIP policies and procedures, and to document the current set of policies and procedures. The primary research tasks conducted for this study included the following:

- Document Review and Analysis - The project team reviewed background materials identified by the Department's study director. In addition to the documents referenced in this report and included in the appendices, the project team also reviewed a sample of utility Plans and Status Reports.
- In-Depth Interviews with Program Staff - The project team conducted in-depth interviews with the staff of the Department's CIP Unit to develop an understanding of low-income program's policies and procedures, and to identify additional materials for review.
- In-Depth Interviews with Other Department Staff: The project team conducted in-depth interviews with the staff of the Department's WAP and EAP Units to develop a better understanding of program coordination at the Department and service provider level.
- Meeting on Regulatory and Policy Analysis: The project team met with Department staff to review the findings from this analysis, verify our understanding of the policies and procedures, and identify outstanding issues related to those policies and procedures.

The companion program evaluation study also contributed to the analysis in several ways.

- Energy Savings Platform (ESP) Database: The evaluation study included analysis of low-income program information reported by COUs in the ESP database for 2013 and 2014.
- Analysis of COU and WAP Service Provider Service Territories – To understand the potential for collaboration between the COUs and WAP service providers, the Department and the project team worked together to map the overlap between the service territories for the COUs and the WAP service providers.
- In-Depth Interviews with Aggregators, Utilities and Service Providers: The evaluation study included in-depth interviews with samples of COU aggregators[2], COUs, and service providers. Those interviews gave us a better understanding of COU program design and implementation.

[2] The term "aggregator" is used to describe organizations that are eligible to be involved in designing and implementing CIP programs on an aggregate basis on behalf of individual COUs. They include electric generation and transmission power cooperatives, municipal power authorities, and other nonprofit entities.

The key documents reviewed for this study are referenced in this report and important sections of those documents are included in the report appendices. In-depth interview reports are available on request.

1.2 Organization of the Report

This report is designed to give the reader an understanding of program's underlying regulatory framework, the current IOU policies and procedures, and alternatives for program policies and procedures that might increase the effectiveness and/or efficiency of the programs. The report has the following sections:

- Summary - Furnishes an overview of the report.
- 1.0 Introduction - Describes the study purpose and methodology.
- 2.0 LI CIP Regulatory Framework - Reviews the relevant language in the Statutes, Rules, Regulatory Decisions and Orders, and communications, instructions, and guidance documents published by the Department. Discusses how changes are made in the framework and any barriers presented by the framework.
- 3.0 LI CIP Policies and Procedures - Documents how the regulatory framework is used by the Department to ensure that utilities meet CIP low-income spending requirements. Identifies areas where policies and procedures appear to be inconsistent or unclear.
- 4.0 Low-Income Program Design - Identifies low-income program design parameters and distinguishes among those for which the Department has issued guidance, those for which the Department has made recommendations but allows utilities to adopt alternative designs, and those on which the Department has not furnished guidance.
- 5.0 Findings and Recommendations - Offers recommendations for changes in CIP policies and procedures that could potentially improve the efficiency and/or effectiveness of the COU low-income programs. Discusses potential strategies for building consensus for change in the context of the existing regulatory framework.
- Appendices - Identifies important parts of the regulatory framework documents and highlights the language that is particularly relevant to the establishment of policies and procedures related to the CIP low-income spending requirement.

This report is designed to complement the Low-Income Program Assessment for COUs. This report is focused on policies and procedures, while the Assessment report is focused on program design and implementation. Since there is a relationship between those two topics, there is some overlap in the content of the two reports.

2.0 LI CIP Regulatory Framework

This section of the report lists the components of the CIP regulatory framework and discusses the role of each in establishing the policies and procedures related to the CIP low-income spending requirement, including the following:

- Statutes - The relevant Minnesota Statutes are 216B.241 Energy Conservation Improvement and the statutes that define the types of utilities referenced in 216B.241.
- Rules - Minnesota Rules Chapter 7690 specifies the "procedures to be followed by public utilities (i.e., investor-owned utilities or IOUs) in submitting, and by the department in analyzing and selecting, proposals for conservation improvement programs..." While the Rules are a major component of the CIP regulatory framework, they do not apply to COUs. Procedures for submitting and analyzing COU CIP activities is generally provided in Department communications, instructions, and guidance.
- Regulatory Filings (Commissioner's Orders/Decisions) - The Department conducts a review each year of whether COU results for the previous year and plans for the coming year meet the statutory requirements. The Department publishes an annual compliance review letter summarizing its findings through the electronic docket systems. The Department also can initiate a regulatory proceeding to address an important policy issue that might result in a Commissioner Order or Decision that pertains to CIP.
- Department Communications/Instructions/Guidance - The Department furnishes guidance to utilities by sending communications to all utilities, preparing instructions for filing procedures, and developing and posting guidance documents.
- Correspondence - In some cases the Department communicates with individual utilities or organizations in response to questions about how CIP policies and procedures apply to specific circumstances. In-depth interviews with utilities and other organizations suggest that such communications are often considered by the affected utility or organization to be guidance.

In our review, we examined these components of the CIP regulatory framework for language and material related to low-income CIP programming. We identified ways in which each component of the framework supports the development of effective low-income programs or presents barriers to the development of effective low-income programs. We also considered how a fresh interpretation of language and updates to guidance might allow the Department to improve the quality of low-income CIP programming.

2.1 Statutes

The Energy Conservation Improvement statute was first enacted in 1980. The Next Generation Energy Act of 2007 made significant revisions to Minnesota Statutes 216B.241 and added a new subdivision related to spending on low-income energy programs. Subdivision 7 establishes the low-income program spending requirement and furnishes guidance related to the LI CIP. Requirements established in other parts of the statute also are relevant to the discussion of LI CIP policy and procedures. In addition, other Minnesota Statutes that define the different types of electric and natural gas energy services also are important in that 216B.241 mandates different requirements for different types of utilities. Appendix A includes excerpts from Minnesota Statute 216B.241 with the relevant language related to low-income requirements highlighted.

2.1.1 Types of Utilities

216B.241 has different requirements for different types of utilities. For purposes of LI requirements, the important types of utilities are:

- Investor-Owned Electric Utility (Electric IOU) - A public utility organized as a private enterprise that furnishes retail electric service.
- Community-Owned Electric Utility (Electric COU) - A municipal electric utility (i.e., governed by a municipality or a municipal utility commission) or cooperative electric association (i.e., member-owned cooperatives) that furnishes retail electric service.
- Investor-Owned Gas Utility (Gas IOU) - A public utility organized as a private enterprise that furnishes retail natural gas service.
- Community-Owned Gas Utility (Gas COUs) - A municipal gas utility (i.e., governed by a municipality or a municipal utility commission) that furnishes retail natural gas service.

Appendix B furnishes additional information on the statutes that establish those definitions and statistics on the number of IOUs and COUs.

2.1.2 Requirements for Low-Income Programs (Subdivision 7)

Subd. 7(a) contains language related to the low-income spending requirements. The spending requirements are different for different types of utilities:

- Electric IOUs and COUs - "A utility or association that furnishes electric services must spend **at least 0.2 percent** of its gross operating revenues from residential customers in the state on low-income programs."
- Gas IOUs - Must spend "**at least 0.4 percent**, of its most recent three-year average gross operating revenue from residential customers in the state on low-income programs."
- Gas COUs - Must spend "**at least 0.2 percent**, of its most recent three-year average gross operating revenue from residential customers in the state on low-income programs."

Note that Subd. 7(d) allows a utility or association to "petition the commissioner to modify its required spending..." under certain conditions. At the time of this report, no utility had petitioned the commissioner for such relief.

Certain references in Subd. 7(a) and interpretations of Subd. 7(a) should be highlighted.

- Sales - Subd. 7(a) refers to a "three-year average" for residential gas gross operating revenue (GOR), but does not reference a three-year average for residential electric GOR. The Commissioner ordered in the filings associated with the 2013 IOU Status Reports that the three-year average should be applied to electric GOR to determine the low-income spending requirement for IOUs. The Department applied the same requirements to COUs. Beginning with their compliance review letters of 2013 results and 2015 plans, the Department began notifying COUs that the Department would begin applying a three-year baseline to COUs starting with 2016 plans.
- Small Municipal Gas Utilities - Subd. 1b(a)(1) states a minimum total CIP spending amount that applies to "a municipality with more than 1,000,000,000 cubic feet in annual throughput sales to retail customers." Subd. 7(a), which establishes the three-year average baseline for determining the LI CIP spending requirement, refers to "a municipal gas utility that furnishes gas service...". The Department has applied that same standard in 1b(a)(1) to the Subd. 7(a) spending requirements. That is, Subd. 7(a) only applies to municipal gas utilities with more than 1,000,000,000 cubic feet in annual throughput sales to retail customers rather than to all municipal gas utilities regardless of throughput sales.
- Energy and Conservation Fund - Subd. 7(b) allows utilities to meet the LI CIP spending requirements by contributing "money to the energy and conservation fund." Subd. 7(c) describes how the commissioner would use the money in the fund to implement LI CIP programs. It is important to note that Subd. 7(c) says that, if a utility contributed money to the fund, the Department would have to ensure that the program furnished services in that utility's service territory. No utility has chosen to contribute money to the fund in lieu of meeting the spending requirements.

2.1.3 Definitions of Low-Income (Subdivision 1)

The definition of "Low-income programs" is important in the context of the LI CIP requirements. As noted above, Subd. 7 requires utilities to spend a certain amount on "low-income programs." In Subd. 1 low-income programs are defined as "energy conservation improvement programs that directly serve the needs of low-income persons, including low-income renters."

There are several parts of the definition that are important when considering whether a utility is meeting the LI CIP spending requirements.

- Low-income persons: Previous statutory and regulatory language sometimes referred to low-income customers, at other times to low-income households, and still other times to low-income persons. The current statute refers to low-income persons.
- Low-income renters: Previous statutory and regulatory language referred to renters. The current statute refers to low-income renters.
- Low-income programs: The statute says that "Low-Income Programs" are those that "directly serve the needs of low-income persons, including low-income renters." The statute does not clarify what it means to "directly serve" low-income persons. Does a utility have to "directly

serve" low-income persons by having programs that are only available to low-income persons? Or, does any program in which a low-income person participates "directly serve" that low-income person's needs?

The current Statutes do not furnish a definition of a low-income person or a low-income renter. The most recent statutory language prior to the 2007 Statute defined low-income households as those with incomes at or below 50% of the State Median Income. That definition is consistent with the current income threshold for the Minnesota Energy Assistance Program (EAP). The current Statutes give the Commissioner the responsibility of deciding what programs "directly serve the needs of low-income persons."

2.1.4 Requirements for Cooperative Associations and Municipalities (Subdivision 1b)

The primary purpose of Subdivision 1b is to establish the CIP spending requirements for electric cooperatives and municipal electric and gas utilities. However, there are two parts of this subdivision that affect LI CIP program implementation and reporting for COUs.

- Subd. 1b(g) - This section of the statute requires COUs to file energy conservation improvement plans and to report on energy conservation improvement spending and investments. The schedule for such plans and reports are to be "determined by order of the commissioner...". Currently, the commissioner requires COUs to file plans annually and to report on spending and investment annually. However, under the statute, the reporting period could be as much as three years. [Note: Reporting requirements for IOU utilities are defined in Minnesota Rules Chapter 7690, not in the statute.]
- Subd. 1b(f) - This section of the statute allows a generation and transmission cooperative electric association or municipal power agency to "invest in energy conservation improvements on behalf of the associations [retail cooperatives and municipalities] it serves and may fulfill the conservation, spending, reporting, and energy-savings goals on an aggregate basis." While not currently the practice, the Statute allows for the interpretation that these organizations could meet their LI CIP requirements in aggregate.

The language in these two parts of Subd. 1b may offer the Commissioner greater flexibility in establishing the ways that COUs can meet LI CIP spending and reporting requirements.

2.1.5 Summary of Findings on Statutory Language

One strength of the statutory language is that it establishes a requirement that utilities must invest a certain amount in low-income energy efficiency programs. In some other jurisdictions, budgets for low-income programs are negotiated through rate cases or are budgeted as one component of a comprehensive portfolio of programs. The Minnesota statute ensures that a minimum amount of funding is directed to low-income customers. This furnishes both COUs and low-income service providers with good information with which to make longer-term program plans.

There are some ways in which the statutory language leaves a considerable amount of uncertainty related to low-income program requirements.

- Definition of Low-Income Persons – The statute does not define who is a low-income person. That gives the Commissioner and the utilities the flexibility to propose to address the needs of certain populations that may not be served by publicly-funded programs. However, because the statutory funding requirement is fixed, expansions of the definition of low-income can dilute the benefits of the program to the populations that have the greatest need for the program.
- Rationale for Spending Requirement – The statute includes requirements for overall CIP spending and for spending on low-income programs. However, it does not furnish a rationale for why those specific spending levels were adopted. In recent years, utilities have exceeded their CIP program spending requirements to meet their CIP program energy savings requirements. As a result, LI CIP spending as a percentage of overall CIP spending has been reduced. If the statutory intent of setting low-income spending requirements was to ensure that a certain share of CIP spending was dedicated to low-income persons, that objective is no longer being met.

The Commissioner has the authority to develop LI CIP policies and procedures that can address the issues related to which customers are counted as low-income persons and to whether certain programs should count toward the low-income spending requirement.

2.2 Minnesota Rules

Minnesota Rules Chapter 7690 specifies “procedures to be followed by public utilities in submitting, and by the department in analyzing and selecting, proposals for conservation improvement programs...” These rules were promulgated in 2005, prior to the addition of Subd 7. in the Next Generation Energy Act of 2007. As such, they do not explicitly reference low-income spending requirements. The Rules apply only to the IOUs. But, the reporting and review framework established by the Rules was partially replicated by the Department in defining COU reporting and review requirements.

The Rules originally required that public utilities (i.e., IOUs) submit the following filings to the department.

- Program Filing - The IOUs are required to file a Biennial Program Plan.
- Program Status Reports – The IOUs are required to file an annual program Status Report.

Note that the statute in place at the time the Rules were promulgated did not require a specific amount of CIP funds to be spent on low-income persons and renters.

The IOU reporting procedures have changed in at least three important ways in the time since the Rules were last updated.

- Planning Period – The IOUs were originally required to file Biennial Plans. The IOUs are now required to file Triennial Plans.
- Organization of the Report – The IOUs were originally required to submit a Plan for their overall program and the individual projects that implemented the program. In addition to reporting on those individual projects, the IOUs are now asked to group those projects by program segment – Business, Residential, and Low-Income – and to also furnish summary information for each segment.
- Energy Savings Platform (ESP) – In addition to filing Annual Status Reports, the IOUs have been asked to submit information on their programs in the ESP.

The COU reporting procedures are different in two ways.

- Planning and Reporting Period – Each year the COU files an Annual Report for the past year and an Annual Plan for the next year. For example, in 2016 a COU was required to file an Annual Report for 2015 and an Annual Plan for 2017.
- Energy Savings Platform (ESP) – An IOU submits information to ESP and files their Annual Status Report and, for years in which a plan is required, their Triennial Plan. The Department reviews the information submitted through ESP and the IOU filing. A COU submits information to ESP and that information is reviewed by the Department.

The information submitted through ESP by the IOUs and COUs is less detailed than the information submitted by the IOUs in their Annual Status Reports and Triennial Plans. Because of that, it is more difficult for the Department and other parties to develop an in-depth understanding of the programs implemented by the COUs.

2.3 Commissioner's Orders/Decisions

Formal proceedings sometimes result in Commissioner Orders or Decisions[3] that establish policies and procedures. In most cases, Commissioner's Orders that affect LI CIP policy and procedures are issued in the context of the utility CIP Plan and Status Report filings. These Orders furnish guidance to the individual utility and sometimes may be extended to furnish guidance to other utilities. However, the approval of a policy or procedure for one utility does not guarantee that it would be approved for another, potentially introducing some ambiguity in CIP regulation.

The Department may also independently initiate a proceeding on a certain policy issue. Commissioner Orders in such proceedings would apply to all those parties identified in the Decision.[4] As such, those proceedings offer clearer guidance with respect to CIP regulations.

[3] These decisions may take the form of a "compliance review letter," as described in most of the examples in this report.

[4] The Department has initiated dockets specific to certain CIP policies and procedures. Using this process, the Department publishes a proposal, solicits comments, and issues a Decision. Recent examples concerned including savings from behavioral

2.3.1 Low-Income Spending Requirement Baseline

The Statute (216B.241 Subd. 7) specifies that the LI CIP natural gas low-income spending requirement is calculated as a percentage of a "three-year average" of the GOR from residential customers. However, the statutory language for LI CIP electric spending refers only to GOR from residential customers, not a three-year average for the low-income spending requirement. In 2013, the Commissioner ordered the electric IOUs to base their low-income spending requirements on a three-year average of residential GOR. However, that change was not applied to COUs at that time. The Department began applying the change to COUs with their 2016 plans, which were filed in 2015. Beginning with their compliance review letters of 2013 results and 2015 plans, the Department began notifying COUs that the Department would begin applying a three-year baseline to COUs starting with 2016 plans.

2.3.2 Low-Income Spending Shortfalls

The Statute (216B.241 Subd. 7) specifies that a utility must spend the required amount on low-income programs. However, the statute does not furnish guidance on what should happen when a COU does not meet the low-income spending requirement. Also, it does not explicitly indicate whether either verified or estimated participation in CIP programs counts toward the spending requirement. One aggregator filing shows how this has been addressed in Commissioner Orders. This example demonstrates that, at the time of this filing, the Commissioner did not attempt to order COUs to comply with the CIP low-income spending requirement. Rather, the focus was on alerting the COUs to the failure to meet the spending requirement. In this example, all the COUs stated that they planned to meet the spending requirement in the next program year. So, it is not clear what the Commissioner's position would have been if the COUs plans indicated that they would not comply with the spending requirement. However, according to the Department in the case where a COU does not indicate their intention to comply with the spending requirement, the compliance letter from the Department would state that the Commissioner does not approve the utility's plan.

2014 Great River Energy Filing

The Commissioner's letter issued to Great River Energy concerning it 2014 CIP results and 2016 CIP plan suggests that the Department encourages, but does not require COU utilities to meet the low-income spending requirements on an annual basis. Relevant passages from the letter include:

- "Minnesota Statutes required each electric utility and natural gas municipal utility to invest a minimum of 0.2 percent of its residential Minnesota GOR on CIP programs that directly serve the needs of low-income persons, including renters."
- "Each member utility is responsible for meeting the low-income spending requirements. While Department policy currently allows cooperatives and municipalities to count a portion of

programs and updating the Technical Reference Manual. There are no examples of dockets concerning CIP policies related to low-income topics.

> general residential spending as low-income, the Department strongly encourages all utilities to meet their low-income spending requirements through programs that directly serve the needs of low-income persons, including renters."

The letter notes that five of the member organizations "did not invest at least 0.2 percent of their Minnesota residential GOR on low-income persons through CIP." But, it finds that the 2016 plan "Shows that each member organization will invest at least 0.2 percent of its Minnesota residential GOR on low-income customers through CIP in 2016."

COUs submit their status report for the previous year and their plan for the next year in the same filing (i.e., their ESP report). The review letter sent to the aggregator and the individual utilities first discusses the failure by some utilities to meet the spending requirements. It is important to note that it does not require them to address that spending shortfall as was done in the case of an IOU. In the review of the plan for the next year, the review letter does note that all utilities have made plans to meet the low-income spending requirement.

2.3.3 Moderate-Income Customers

As discussed above regarding the definitions in Subdivision 1, the statute does not define the term "low-income." Prior statutes defined the term "low-income" in ways that were consistent with the EAP and WAP definitions of low-income. Both IOUs and COUs have for the most part continued to design their low-income programs with an income eligibility requirement that is consistent with the requirements of at least one of these federal programs. The Order discussed below allowed MERC to implement a moderate-income program. However, we did not identify any discussions between the Department and COUs about implementing such a program.

2012 Minnesota Energy Resources Corporation Order

In 2012, Minnesota Energy Resources Cooperation (MERC) proposed a residential segment program in its 2013-2015 Triennial Plan filing (Docket No. G007,G011/CIP-12-548) called 4U2 to serve moderate-income customers. These customers would qualify for the program if their income was 201% to 300% of the federal poverty level.

The Department review of the proposed program raised questions about two matters. First, there were questions about the need to enhance the proposed income verification procedures. Second, Department staff suggested that the program should be moved to the low-income segment.

MERC agreed to make these changes to their Plan. This program was approved as a low-income program in MERC's CIP Plan. MERC is the only utility that has a low-income program that serves a group of households with income significantly higher than EAP and WAP guidelines. It is not clear whether moderate-income programs proposed by other utilities would be approved.

2.3.4 Alignment of Utility Program Design with WAP Standards

The Department has encouraged utilities to collaborate with WAP service providers and use WAP protocols for service delivery. Some COUs fund low-income programs that pay for individual energy efficiency measures delivered to low-income households that are participating in WAP. However, many COUs implement other types of low-income programs that are not implemented by WAP service providers. The Department has not furnished any guidance to COUs about what types of low-income programs should follow WAP protocols. Moreover, the information submitted in the ESP often is inadequate to allow the Department to assess the COUs program protocols.

2.3.5 Reporting of Estimated Low-Income Participation

For each program the utility lists in the ESP, it is asked to estimate the share of participants in the program that are low-income. For dedicated low-income programs (i.e., programs that are designed and implemented to serve low-income households) the COU is instructed to enter 100%. For residential and commercial[5] segment programs, the COUs is encouraged to make their best estimate of the share of program participants that are low-income. The instructions furnished by the Department include information on the share of households in each county in the state that are low-income and suggests that the COUs can use that percentage for general residential programs.

Our review of the COU ESP data finds that there is wide variation in the information entered by COUs for programs that are not dedicated low-income programs. Some COUs make use of the population percentages supplied by the Department. However, for many COU programs, percentages that are lower or higher than those county population shares are used. Through in-depth interviews with COUs, we learned that some of those population percentages are based on specific information developed by the COU. However, the ESP does not include detailed information that would allow the Department to assess the appropriateness of those percentages.

2.3.6 Landlord Contributions for Rental Units

The ESP does not require COUs to enter information on the number of renters served by each of their programs. The ESP also does not collect enough detailed information about the COUs programs to allow the Department to review the requirements for landlord contributions for programs that serve renter-occupied housing.

[5] In ESP, only category “multifamily” within the commercial sector allows utilities to enter a percent for LI participation.

2.3.7 Summary of Findings on Commissioner Orders

Our review of Commissioner Orders with respect to COUs finds that the Orders mainly focus on instructing the COUs on what information they must file and on alerting the COUs whether they met their low-income spending requirement. The Commissioner has not ordered any COU to remediate any spending shortfall, nor has the Commissioner ordered any COU to increase their spending on dedicated low-income programs. Our research does find that some COUs do meet their low-income spending requirements with dedicated low-income programs. However, many do not.

2.4 Department Correspondence/Instructions/Guidance

The Department furnishes guidance to utilities by sending communications to all utilities, preparing instructions for filing procedures, and developing and posting Guidance Documents. There are several of these types of communications that have important implications for LI CIP policies. They are listed here in chronological order of their date of issuance. Appendix D includes excerpts from the relevant documents with the language related to LI CIP policy highlighted.

2.4.1 Garvey Memo - December 29, 2005

In 2005, under Deputy Commissioner Garvey's leadership, the Department sent a letter to COU utility program managers. That letter furnished program managers with updated information on filing and reporting requirements, as well as on other matters related to low-income CIP programs. The memo included a separate section labeled "Low Income Spending." In that section, the letter reminds utilities that they should "devote a portion of the money spent on residential conservation improvement programs to projects that directly serve the needs of low-income customers" and furnishes a "rule of thumb" for the specific spending levels. Note that this rule of thumb is no longer applicable since Subd. 7 of the statute sets LI CIP minimum spending requirements.

The letter also recommends that utilities partner with local weatherization service providers or market their residential CIP projects to low income households. The memo goes on to discuss a special circumstance that relates to "small utilities that do not have budgets that allow the utility to offer more than one project or the administrative resources to oversee separate projects directed to low-income customers...." For such utilities, the memo says that "these small utilities may assume that a portion of their existing residential CIP projects serve low-income customers." It then furnishes a procedure for using Census data to estimate low-income participation in CIP projects. The language in this letter is important because it is still used today to make decisions with respect to estimating LI CIP spending through residential CIP programs for COU utilities and associations.

2.4.2 Energy Conservation Improvement Programs - Project Guide for Municipal Utilities and Electric Cooperatives - March 2006[6]

This guide was issued in 2006 (prior to the passage of the Next Generation Energy Act of 2007). As such, it does not discuss required levels of spending on low-income programs or on low-income persons. However, it does discuss two important concepts for COUs.

- Direct vs. Indirect - This guidance document refers to the definition of direct and indirect programs. It lists the definition of direct projects as those that "produce measured energy and demand savings (kWh, kW, or Mcf)" and indirect projects as "those that do not produce direct savings but help educate customers about energy efficiency or may motivate them to participate in a direct savings project."
- Low-Income Projects - This guidance document lists separate savings amounts for low-income projects. On page 9, it states that "estimated savings are higher than for the similar residential project. This is because the low-income projects involve removing an older working appliance and replacing with a much more efficient one." The Minnesota Technical Reference Manual has replaced the guide as the default source of energy savings calculations. But, the TRM does not refer to any differential between savings for low-income projects and savings for similar residential projects. This guide is still posted on the Department CIP webpage and Staff recently citied it as a resource for COU program administrators for CIP program design ideas.

The Guide furnishes useful information for COUs, but is not completely consistent with current program guidelines

2.4.3 Multifamily Buildings with 5+ Units[7]

This guidance document was developed as part of the Minnesota Environmental Initiative 1.5 Percent Energy Efficiency Solution Project which contained a goal of assisting utilities in identifying strategies to overcome specific challenges of the CIP statues, including serving low-income customers. This guidance allows utilities to identify affordable housing and claim CIP investments in those buildings as 100 percent low-income spending. The guidance states that "For the purpose of CIP LI spending, buildings with 5 or more units must have at least 66 percent of the units occupied by LI households. If a building meets this threshold of LI occupants, 100 percent of the building can be considered LI for the purpose of CIP programs." [It is important to note that this guidance applies to all measures installed in the building, including building-level HVAC and water heating systems, common area electric measures, and

[6] Minnesota Department of Commerce, March 2006. Energy Conservation Improvement Programs Project Guide for Municipal Utilities and Electric Cooperatives. (http://mn.gov/commerce-stat/pdfs/cip-coop-muniguide.pdf)

[7] Minnesota Department of Commerce, August 3, 2012. CIP Policy Guidelines: Low-Income Programming in Multifamily Buildings with 5+ Units. (http://mn.gov/commerce-stat/pdfs/conserve-prog-low-income-guide.pdf)

measures installed in individual units. This is different from WAP guidelines. In the WAP program, building-level measures can be installed without further income verification but unit-level measures are only installed for tenants that are verified low-income households.

This guidance document references the affordable housing definition of 60 percent of area median income. That is different from the state LIHEAP guidelines (50 percent of state median income (SMI)) and WAP guidelines (greater of 200 percent of poverty and 50 percent of SMI).

2.4.4 Energy Savings from Delivered Fuels[8]

This guidance document was also developed as part of the Minnesota Environmental Initiative 1.5 Percent Energy Efficiency Solution Project. It states that "Electric utilities may provide direct space heating and domestic hot water savings measures to low-income delivered fuel customers and low-income small gas municipal utility customers offered in conjunction with the Weatherization Assistance Program. Utilities may claim the energy savings from those measures towards their CIP energy saving goals."

2.4.5 Minnesota Utility 2016 CIP Reporting Instructions for Cooperatives and Municipal Utilities

COUs are required to file their CIP plans and status reports through the ESP. The Department furnishes COUs with instructions on how to enter the plan and report data into ESP. In the context of these instructions, the guidance document appears to validate certain practices with respect to CIP reporting on low-income spending.

- Minnesota Technical Reference Manual - The reporting instructions say that "the Minnesota Technical Reference Manual is the default source of approved savings calculation methods." However, other guidance also indicates that a utility can use the TRM or other methods with adequate documentation.
- Low-Income Program Categories - Table 2 of the instructions furnishes descriptions of the program categories Low-income Weatherization, Low-income Specialty, and Indirect Low-income. In particular, the definition of Low-income Weatherization explicitly refers to "funding assistance for the federal Weatherization Assistance Program." For practical purposes, these three categories represent dedicated LI programs, or programs that exclusively serve LI customers.
- Participation of Low-Income Participants in Residential Programs - The reporting instructions affirm the method for estimating low-income spending described in the Garvey memo. The instructions state that "actual low-income participation data may be used if available, or estimated low-income participation data from the 2010 US Census data may be used." Appendix

[8] Minnesota Department of Commerce, August 3, 2012. CIP Policy Guidelines: Energy Savings from Delivered Fuels. (http://mn.gov/commerce-stat/pdfs/conserve-prog-delivered-fuels.pdf

C of the instructions furnishes county-level estimates of the percent of households that are low-income estimated using the 50% of state median income threshold.

- Renter Participation - The ESP application does not ask for information on spending for low-income renters. Therefore, renter participation is currently only reported by IOUs.
- Delivered Fuel / Natural Gas Savings - The instructions reference the Energy Savings from Delivered Fuel guidance discussed above and remind COUs that "electric utilities may count equivalent kWh savings from heating fuel... savings achieved in low-income programs under certain conditions."

The reporting instructions do not explicitly discuss LI CIP spending compliance as including or excluding the measured or estimated participation of low-income persons in residential CIP programs. However, ESP calculates the amount of LI CIP spending by summing all LI CIP spending, including spending for dedicated LI CIP programs and estimated spending on low-income persons within all residential CIP programs. ESP also calculates the LI CIP percentage of spending as total LI CIP spending (dedicated and estimated) divided by the three-year average residential GOR.

2.4.6 Summary of Findings on Guidance Documents

The Guidance Documents issued by the Department appear to be a particularly effective way to develop and communicate LI CIP policies and procedures. Some examples include:

- Reporting Instructions – In our review, we found that almost all COUs have filed the required reports with appropriate information.
- Energy Savings from Delivered Fuels – Our in-depth interviews with WAP service providers identified that some COUs have made effective use of this guidance to meet their low-income spending requirement.
- Collaboration with WAP Service Providers – Our in-depth interviews with COUs and WAP service providers found that many COUs use WAP service providers to fulfill their low-income spending requirement.

The guidance documents furnish clear and consistent information that makes it easier for COUs to fulfill their spending requirements.

2.5 Other Relevant Communications

One important component of the Regulatory Framework that is often undocumented is direct communications between a utility and Department staff. A utility may ask a question about whether a certain procedure is appropriate or whether a certain program should be included in the utility's low-income program segment. In some cases, the staff member will furnish a preliminary answer and offer to have follow-up discussions. However, in the context of developing Plans or filing Status Reports, the utility may simply consider that preliminary response to be a statement of Department policy. In other cases, the DER CIP unit may discuss the issue, make a decision, and communicate that decision to the individual utility. However, there is no mechanism for communicating that with other utilities or for explaining the context in which that decision was made so that other utilities can assess whether the same circumstances apply to their procedures or programs. It is not clear that there is any way to resolve this issue. But, it is useful to know that this is a potential communication gap in the Regulatory Framework that could represent a risk for the Department in terms of consistent treatment of utility filings.

3.0 LI CIP Policies and Procedures

This section of the report lists LI CIP policies and procedures, identifies the statutory or regulatory basis for each policy or procedure, and discusses any exceptions to the policy or procedure. The specific policies and procedures reviewed include:

- LI CIP Spending Requirements
- Qualified LI CIP Spending
- Reporting Requirements
- Compliance Policies

The focus of this section of the report is on the current LI CIP policies and procedures. Where there have been changes in policies and/or procedures, explicit reference is made to the rationale for those changes.

3.1 LI CIP Spending Requirements

Based on the statute and subsequent Commissioner Orders, each utility is required to spend a specified percentage of their most recent 3-year average gross operating revenue from residential customers in Minnesota. The spending requirements that each type of utility must spend on low-income programs is shown in Table 1.

Table 1. Minimum Spending on Low-Income Programs by Utility Type

Type of Utility	Low-Income Spending Requirement Percentage
Electric COU	0.2%
Gas COU	0.2%

Utilities and associations can petition the commissioner to modify their required spending (Subd. 7(d)). No utilities or associations have filed such a petition. As such, there is no policy that defines when such a modification would be allowable.

3.2 Qualified LI CIP Spending

The statute requires that utilities and associations spend a certain share of their residential GOR on "energy conservation programs that directly serve the needs of low-income persons, including low-income renters." There are at least two different ways in which this requirement is implemented in terms of LI CIP policy for COUs.

- Dedicated Low-Income Programs - COUs meet or exceed the required low-income spending amount on programs that exclusively serve low-income customers, referred to as dedicated low-income programs. In review documents, the Department indicates it prefers that COUs fulfill their low-income spending requirement in this way.
- Estimated Low-Income Spending – For other programs, the ESP requires that the COU furnish information on the percentage of program spending that is received by low-income customers.

The ESP totals the amount of spending on the dedicated low-income programs and the amount of low-income spending on other programs to develop a total value for low-income spending. That value is compared to the required spending amount.

3.3 LI CIP Reporting Requirements

COUs are required to file annual CIP Plans (prospective) and annual Status Reports (retrospective) through the ESP. Reporting for programs in the low-income segment and calculations related to meeting the low-income spending requirements are built into the ESP reporting form. These Plans and Reports give the Department summary information on the extent to which COUs are meeting the low-income spending requirements. However, the ESP reports submitted by COUs are inconsistent in the amount of detail that they furnish. That makes it difficult for the Department to proactively examine the ways that COUs are meeting program requirements.

3.4 Compliance

The information supplied by COUs does not always give the Department the information that they would need to proactively assess the performance of a COU with respect to program requirements.

- Spending Requirement – The Department can use the information in the ESP to assess whether the COU is meeting its spending requirements with spending on dedicated programs, is meeting its spending requirements only when spending on low-income customers in all programs is included, or is failing to meet its spending requirements.
- Program Requirements – It is challenging for the Department staff to understand in detail how a COU is meeting their spending requirement from the information filed in the ESP. As such, with the current reporting procedure, it would be difficult for Department staff to assess whether COUs are meeting any other low-income program requirements.

A review of COU proceedings for 2013 and 2014 finds that some COUs are meeting their low-income program spending requirements with dedicated programs and that others are meeting their requirements with all estimated spending on low-income households. However, using the ESP, it is difficult to assess whether the COU assumptions with respect to the share of residential program spending on low-income customers is reasonable. Some COUs failed to meet the low-income spending requirements, either with dedicated low-income spending or with spending on low-income customers that participate in residential or commercial programs.

4.0 Guidelines for Low-Income Program Design

Many state and local jurisdictions have implemented ratepayer-funded energy efficiency programs similar to Minnesota's Conservation Improvement Program (CIP). Our reviews of those programs find that some regulators furnish detailed guidance on the design and implementation of those programs, while others delegate that authority to the individual utilities, a group of utilities, or an organization that is comprised of utilities and other interested parties. Our reviews also find that regulators tend to furnish more comprehensive guidance on the design and implementation of low-income programs than for market rate programs.

It is important to note that only seven of the 20 jurisdictions reviewed required that at least some of their COUs fund low-income energy efficiency programs. In general, there are fewer requirements for COUs than there are for IOUs. Moreover, the specific requirements for COUs, and how they differ from the requirements for IOUs often was not clear from the program documentation.

In this section of the report, we review a comprehensive set of guidelines common to low-income ratepayer funded programs and document how each is addressed in the context of CIP low-income programs. The specific guidelines we discuss include:

- Definition of "Low-Income"
- Specification of Income Verification Procedures
- Coordination with Publicly-Funded Low-Income Programs
- Identification of Eligible Buildings
- Determination of the Eligible Energy Efficiency Measures
- Guidance on Health and Safety Protocols and Allowable Measures
- Specification of Quality Control Procedures
- Measurement and Verification of Energy Savings
- Evaluation of Program Processes and Impacts

Our review finds that the Department most often makes recommendations to the utilities on appropriate ways to design and implement low-income programs, but gives the utilities the opportunity to design and implement programs that they perceive best meet the needs of their low-income customers.

4.1 Definition of "Low-Income"

The statute defines low-income programs as "energy conservation improvement programs that directly serve the needs of low-income persons, including low-income renters." However, the statute does not define the term "low-income." The Department allows each utility to develop their own definition of "low-income" and to report that definition in their plans.

In most programs we have reviewed, the term “low-income” is defined by statute or by the regulatory agency. Many programs make use of EAP and/or WAP income guidelines. However, there are a number of jurisdictions where income thresholds have been set higher or lower than the EAP and/or WAP thresholds in those states.

In Minnesota, it is not clear what low-income definitions COUs use in their low-income programs since that information is not submitted through the ESP. Some of the COUs work with WAP service providers and implicitly use the EAP and/or WAP income guidelines. However, for those that implement their programs in other ways, there is no consistent information on the definition of low-income customers.

4.2 Income Verification Procedures

In other jurisdictions, we find that some low-income programs have accepted customer self-certification for low-income energy assistance and energy efficiency programs. However, in most jurisdictions, low-income customers are required to apply for EAP or WAP for income certification, or to submit information that is similar to the standards established by EAP or WAP.

The Department has not furnished detailed specifications for income verification procedures. However, the Department developed a joint application that explicitly references EAP, WAP, and CIP. The application form collects detailed information that is used for income verification. Most COUs are familiar with this form because it is completed by their customers who receive EAP. Where utilities deliver low-income program services through EAP or WAP service providers, the EAP/WAP/CIP application form meets certification requirements.

4.3 Coordination with Publicly-Funded Programs

It is common for ratepayer-funded low-income energy efficiency programs to coordinate in some way with the publicly-funded energy assistance and/or energy efficiency programs. Options include:

- Integration - In some jurisdictions, the ratepayer funding is integrated with the WAP program funding and the program is managed by the state WAP agency without the participation of the utilities.
- Collaboration - In some jurisdictions, individual utilities are given the authority to design and implement low-income energy efficiency programs. In those jurisdictions, it is common for some utilities to collaborate with local WAP service providers, while other utilities use private contractors.
- Coordination - In some jurisdictions, utilities design and implement low-income energy efficiency programs and hire contractors to implement the programs independently of the WAP program. In such jurisdictions, there is often coordination with the WAP program related to which markets and/or measures are the focus of WAP and which are the focus of the ratepayer-funded programs.

The Department has encouraged the COUs to collaborate with WAP service providers in the Garvey memo and again in the Project Guide for Municipal Utilities and Electric Cooperatives. In the 2016 Reporting Instructions it defines “Low-Income Weatherization Projects” as “Utility funding assistance for the federal Weatherization Assistance Program. However, the Department has not engaged with utilities, WAP service providers, or EAP service providers in such a way that would maximize the collaboration between utilities and the WAP service providers. The in-depth interviews with Department staff found the following:

- Compliance Reviews - The CIP compliance reviews do not comment on whether the utility low-income programs collaborate with WAP service providers.
- CIP Unit - CIP unit staff do not actively communicate with WAP service providers about CIP low-income program opportunities.
- WAP Unit - WAP unit staff do not actively communicate with utilities that are implementing CIP low-income programs to keep them updated on changes in WAP policies and procedures. WAP unit staff do not proactively monitor or review the CIP-funded work completed by WAP service providers, except when a CIP-funded measure is part of a job that is being inspected by the state monitor.
- EAP Unit - EAP unit staff do not actively communicate with utilities about their CIP low-income energy efficiency programs. One component of the EAP program is the Energy Related Repair program (ERR) that funds repair and replacement of equipment in emergency circumstances. The EAP unit does not actively communicate with utilities about that program even though there is some potential for collaboration. Rather, the EAP unit encourages ERR service providers to install high efficiency equipment and to apply for applicable utility CIP incentives.

The CIP low-income program impact evaluation found that there is substantial collaboration between the utilities and WAP service providers in the delivery of CIP-funded low-income programs. However, while the Department encourages such collaboration, it is not an active partner in that collaboration.

4.4 Eligible Buildings

One common question from utilities relates to types of buildings that can be counted toward a utility's low-income spending requirement. There are at least three dimensions that are often considered by low-income program funders.

- Housing Type - Low-income persons may occupy single family homes, housing units in small multifamily buildings, or housing units in large multifamily buildings, or they may live in group quarters. Low-income programs often treat those buildings in the following way.
  - Single Family Homes - Are eligible for the program if the household occupying the home is income-eligible.

    - Multifamily Buildings – Are eligible for building-level weatherization services if two-thirds of the housing units are occupied by income-eligible households and are eligible for unit-level measures if the tenant is income-eligible.
    - Group Quarters - Are sometimes eligible for the program. For example, the WAP program will serve a homeless shelter, but will not serve a college dormitory.
- Housing Unit Ownership - Most programs will serve both owner-occupied and rental units. However, in most cases, the building owner will need to offer certain assurances related to treatment of low-income households occupying the housing unit (e.g. maintaining rent) or may be asked to contribute to the cost of energy efficiency measures.
- Building Purpose - Some programs authorize funding for buildings that serve the needs of low-income households, in addition to buildings that are occupied by low-income households. Examples of such buildings include food shelves, and the offices of Community-Based Organizations.

The Department has not furnished utilities a comprehensive list of buildings that are eligible to be counted toward the CIP low-income spending requirement. However, the Department has given utilities guidance on these issues.

- WAP Recommendations - The Department has recommended that utilities work with WAP service providers to deliver program services and that they follow the WAP guidelines. WAP furnishes detailed guidelines related to housing unit type, housing unit ownership, and building purpose.
- Multifamily Building Guidance - The Department issued guidance related to multifamily buildings (see Appendix D, Item #1) that defines which multifamily buildings are low-income buildings.
- Communications with Utilities - In response to utility questions, the Department has notified individual utilities that they consider spending for food shelves energy efficiency measures to be eligible for low-income program spending, but they do not consider spending for transitional housing or for schools in low-income areas to be eligible for low-income spending. However, our in-depth interviews with COUs found that they are counting program spending on certain types of buildings as low-income without consulting the Department.

Some of this guidance has been published by the Department. However, there is not one location where a utility or WAP service provider could find comprehensive information on this issue. Moreover, the information available to the Department about COU programs is not sufficient for the Department staff to monitor COU compliance with such decisions.

4.5 Eligible Energy Efficiency Measures in WAP Partnership Programs

It is important for the IOU programs to clearly identify what types of energy efficiency measures are eligible for program funding and to specify the conditions under which a measure should be installed. The Department has not furnished explicit guidance on this issue. Since the Department has recommended that the utilities work with local WAP services providers to deliver program services, it appears that some COUs and WAP service providers have inferred that the WAP protocols are to be used for measure selection.

The Minnesota WAP program requires service delivery agencies to install all energy conservation measures that have a savings to investment ration (SIR) of greater than 1.0 and does not allow agencies to install measures with a SIR of less than 1.0. The Minnesota WAP Policy Manual described procedures by which WAP and EAPWX funds can be used together on a housing unit.

It also has information on the conditions under which a building owner can “buy down” the cost of an energy efficiency measure for multifamily buildings (5+ units). However, the Policy Manual does not explicitly discuss procedures for using utility CIP funds to “buy down” the cost of a measure installed in a multifamily building.

DOE regulations do not allow either building owners or utilities to “buy down” the cost of measures in single family homes (1-4 units). However, if the building owner or the utility is willing to pay for the full cost of the measure, the regulations do allow the WAP service provider install the measure as part of WAP service delivery. The WAP Policy Manual does not furnish guidance to WAP service providers on whether that is allowed in Minnesota.

4.6 Health and Safety Protocols and Allowable Measures

A common problem for ratepayer-funded low-income programs is that there is disagreement about whether such programs should follow WAP protocols on health and safety assessments, and whether such programs should pay for health and safety measures that are needed in homes treated by the program. A significant percentage of low-income housing units have health and safety issues that present barriers to installation of some or all energy efficiency measures. While ratepayer-funded programs are usually targeted at achieving energy savings, it is difficult for those programs to serve qualified housing units if they do not have procedures in place to resolve health and safety issues.

Common approaches include:

- WAP/EAP Payment for Health and Safety – In some jurisdictions, ratepayer-funded programs collaborate with WAP and/or EAP and delegate responsibility for payment of health and safety measures to those programs.
- Market Segmentation – In some jurisdictions, housing units with health and safety problems are referred to the WAP/EAP programs, while housing units without such problems are served by the ratepayer-funded programs.
- Payment for Health and Safety Measures – In some jurisdictions, program managers have decided that they need to pay for health and safety measures to maximize ratepayer benefits and to minimize utility liability.

The limited number of in-depth interviews that we conducted with COU program managers suggests that most of the COUs that collaborate with WAP service providers most often rely on WAP/EAP funding to pay for health and safety measures.

4.7 Quality Control Procedures

In “market-rate” residential energy efficiency programs, the participating customer is the “decision maker.” They identify the need for program services, select a contractor to deliver the services, and pay for a substantial share of those services. As such, they have more control over the quality of the work completed in their homes.

In a low-income program, program funds usually pay for all program services. The low-income household can choose to participate or not. But, they do not get to choose which services are delivered or which contractor delivers those services. For that reason, funders of low-income programs usually take responsibility for specifying and verifying quality control procedures. Both public agencies and utilities want to ensure that participating low-income households have good quality services delivered by their programs.

The Department has not furnished detailed specifications for quality control procedures for low-income programs. The Department has recommended that utilities work with WAP service providers to deliver program services. Those service providers follow WAP guidelines for quality control that include: pre-treatment testing of the housing unit, standard work specifications for installation of energy efficiency measures, and post-weatherization testing of the housing unit. In addition, the Department's WAP office monitors the work of those local service providers. However, the Department has not issued guidelines that require that utilities adopt those procedures for their low-income programs that are not delivered by WAP service providers.

In-depth interviews with the COUs find that most delegate responsibility for quality control to their service providers. Where a WAP agency is delivering the energy efficiency procedures, the quality control protocols are clearly documented by the WAP program. However, there were no consistent procedures followed for other types of programs.

4.8 Measurement and Verification of Energy Savings

Most jurisdictions specify measurement and verification procedures for both their market rate and low-income programs. However, most limit those requirements for their COUs. The Minnesota policy of requesting COUs to furnish information on the number of customers served, the number of measures installed, and the projected savings from those measures is consistent with procedures implemented by other jurisdictions.

4.9 Evaluation of Program Processes and Impacts

Some jurisdictions require that utilities conduct periodic evaluations of low-income program processes and/or impacts. However, such evaluations are usually restricted to IOUs with substantial program budgets. The Minnesota policy of not requiring COU program evaluations is consistent with procedures implemented by other jurisdictions.

4.10 Summary of Findings

It is important for the Department to consider its role in setting the policies and procedures that COUs should follow in designing and implementing programs to meet the low-income spending requirements. Compared to other jurisdictions, we find the following:

- Planning and Reporting - The Department has adopted COU planning and reporting procedures that furnish the Department with basic information about how the COUs are meeting their low-income spending requirements.
- Collaboration with Existing Low-Income Programs – Some of the COU programs collaborate with publicly funded programs in ways that can be expected to increase program efficiency and effectiveness. Where programs are working with other types of contractors to deliver programs, it appears that they are using similar procedures for identifying low-income households and for delivering services.
- Eligible Buildings and Measures – Some Department initiatives have helped to clarify which buildings and measures are eligible for low-income programs. However, important gaps remain in guidance on issues such as health and safety measures, resulting in inconsistency among COU programs.
- Program Performance – As in other jurisdictions, the Department requires only basic information from COUs on program performance.

This study finds that the Department's policies and procedures have resulted in Minnesota COUs designing and implementing a diverse set of low-income programs that address the diverse needs of low-income persons. However, it also finds that there are some gaps in the set of policies and procedures that may be barriers to those programs achieving the highest levels of program performance.

5.0 Findings and Recommendations

The statute gives the Commissioner broad powers to specify CIP policies and procedures. The Department policies and procedures on the low-income spending requirement have attempted to help COUs to understand their responsibilities with respect to low-income spending, to make recommendations on how COUs can effectively meet those low-income spending requirements, and to develop reporting systems that make it as easy as possible for the COUs to furnish information on their low-income programs. In that context, we have developed some recommendations for the Department on how they might be able to increase the efficiency and effectiveness of COU low-income spending by furnishing additional guidance to COUs about low-income program opportunities and successes.

5.1 Findings on Policies and Procedures

Sections 2 and 3 of this report furnish information on the development of current LI CIP policies and procedures, and outstanding issues with those policies and procedures. Section 4 of this report reviews a more comprehensive set of possible policies and procedures to identify potential gaps in policies and procedures.

Important findings with respect to spending and reporting requirements include:

- Spending Requirement – Electric COUs and specified natural gas IOUs are required to spend 0.2% of their residential GOR on low-income programs.
- Reporting Requirement – The Department has developed the Energy Savings Platform (ESP) that facilitates reporting by COUs.
- Spending Policies – When the Department developed ESP, it built into the system a procedure that sets the low-income spending percentage for dedicated low-income programs at 100% and allows the COU to specify the low-income spending percentage for their residential programs. Calculation procedures internal to ESP count low-income spending in residential programs as qualified low-income spending for purposes of fulfilling the low-income spending requirement.
- Review Policies – In their review of COUs Plans and Annual Reports, the Department indicates that it prefers that COUs fulfill their low-income spending requirements with spending on dedicated low-income programs. However, the Commissioner has not issued any orders that would require a COU to address shortfalls between required low-income program spending and spending on dedicated low-income programs.

Important findings with respect to guidance and recommendations include:

- Collaboration with WAP Service Providers – In the Garvey Memo and in the 2006 Project Guide for Municipal Utilities and Electric Cooperatives, the Department encouraged COUs to collaborate with WAP service providers. In the ESP instructions, the Department categorizes low-income weatherization projects as those projects that provide “funding assistance to the federal Weatherization Assistance Program.”

- Energy Savings from Delivered Fuels – The guidance allowing electric utilities to count energy savings associated with space heating and water heating energy efficiency measures installed in households that have a delivered fuel as their primary source of heat is particularly helpful to COUs whose service territories are rural and that have many customers with delivered fuel main heat. In-depth interviews with COUs and their service providers identified a number of COUs for which this guidance has been successfully applied to their low-income programs.

The following is a list of what we consider to be the most important gaps in the Department policies and procedures with respect to COUs. In particular, the Department has not furnished guidance to COUs that would help them to address important issues in the design and implementation of their programs within their limited program budgets.

- Health and Safety Assessment and Allowable Measures – Many low-income housing units have health and safety issues that should be resolved prior to the delivery of comprehensive energy efficiency services to the home. Current Department policies do not specify best practices and do furnish information to COUs on how they can best address those issues.
- Eligible Housing Units – The WAP program does not allow certain housing units to be served by the program. Examples of WAP rules that might be appropriate for LI CIP programs include: plans by the low-income household to sell the home; ongoing or planned renovation activities; and, homes that have been condemned. The Department has not made recommendations to COUs on whether those guidelines are appropriate for their programs.
- Measure Selection Procedures – The Department has recommended that COUs follow WAP protocols in terms of program design and implementation. In our in-depth interviews, COU program managers reported that they had questions about what measures can be installed in homes under what circumstances. However, that decision is, in fact, left up to the COU.
- Quality Control Procedures – It is challenging to deliver high quality services to low-income households. The WAP program has specified a quality control procedure for its agencies that includes monitoring field visits by Department staff. In other jurisdictions, it is common for the regulators to require third-party quality control inspections of completed jobs. Most of the COUs report that they delegate quality control to the implementation contractors.

In general, the COUs would benefit from being given more guidance on best practices for low-income programs. Most COUs do not have the staff or budget to develop information on these best practices themselves. Department guidance would help the COU program managers to identify and implement those best practices that are consistent with their program portfolio.

5.2 Supplemental Findings from In-Depth Interviews

As part of the Assessment of COU Low Income Programs, the project team conducted interviews with a sample of COU aggregators, COUs, and COU service providers. During those interviews, each organization identified some ways that the CIP low-income policies and procedures affected their ability to meet program spending requirements and commented on optional approaches to delivery of low-income CIP programs.

The project team interviewed five aggregator organizations. Three of those organizations are very active in working with their COUs to design and implement CIP programs and low-income CIP programs. Two were less involved in CIP and reported that their member COUs took responsibility for meeting program requirements. Their experiences and recommendations were mixed.

- CAP Agencies – They mentioned that they find that CAP agencies can deliver services at a lower cost than other service providers because they are already working with low-income households. However, they were concerned that CAP agencies do not always prioritize the COU spending in order to fulfill their commitments.
- Delivered Fuel Households – They reported that being able to serve delivered fuel households with weatherization services and hot water energy efficiency measures makes it easier to meet spending requirements. But, they also report that some electric COUs are dissatisfied with that approach because it does not result in electric energy savings.
- Buildings and Measures – They reported that the COUs have been effective in identifying specific types of buildings (e.g., Section 8 housing) and measures (e.g., early replacement of inefficient major appliances), but also have noted that some COUs have been told by the Department that those buildings and measures are not eligible for CIP funding.
- Flexibility – They recommend that the Department make options available for COUs that give them greater flexibility to meet their program requirements. One example would be to allow a COU to choose to meet low-income spending requirements over a three-year period rather than a one-year period. Another example would be to implement the statutory option that gives a group of COUs the opportunity to have their aggregator fulfill the spending requirement for a group of COUs.
- ESP – In general, the aggregators handle data tracking and reporting for their member COUs. Only one of the five aggregators interviewed reported that the ESP was useful to the organization. The others four organizations said that they use ESP for reporting only and that they find the interface to be slow, cumbersome, and not user friendly.

Many of these concerns and suggestions would involve more work on the part of the Department staff in that they suggest that each COU should be able to "customize" how they meet their low-income program requirements. That might be very difficult to implement from a Department review perspective. However, the general principle of working to give COUs more flexibility may have merit and might be implemented particularly in terms of the types of buildings and measures that are allowed for inclusion in their low-income programs.

The project team interviewed eleven electric COUs. They included both electric cooperatives and municipal electric utilities. Their experiences and recommendations included:

- Working with CAP Agencies – Eight of the COUs currently work with CAP agencies to deliver the low-income programs. Three of the eight COUs report that their CAP agency(ies) do an excellent job. The other five COUs report that they work with more than one CAP and that some do an excellent job and that some do not.

- Working with Other Providers – The other three of the COUs had previously worked with CAP service providers. One was satisfied, but decided to pursue some other low-income program opportunities. The other two COUs are working with other contractors because the WAP service providers did not meet their needs.
- Delivered Fuel Households – Four of the eight COUs working with CAP agencies allow them to deliver space heating and water heating services with their low-income funds.
- Buildings and Measures – Two of the COUs reported that one barrier to meeting their spending requirement was that the Department told them that certain measures could not be counted as low-income program spending (e.g., common area measures for Section 8 housing). However, other COUs reported that they allocated low-income spending to some of those same types of buildings and measures.
- Flexibility – Some of the COUs reported that they are able to spend the required budget each year. However, most of the COUS reported that there is fluctuation in the amount that they spend because circumstances change each year. They would prefer to have more flexibility in how they meet their program requirements.
- State Conservation Fund – Only one COU expressed an interest in taking advantage of contributing to a statewide conservation fund to meet their low-income spending requirement.

The COU recommendations are similar to those from the aggregators. They would like to have more flexibility in their program design. Some COUs reported that they found the Department's decisions with respect to eligible buildings and measures to be arbitrary unnecessarily intrusive. The COUs that reported problems working with some of their local WAP service providers reported that they thought that it was the Department's job to ensure that local WAP service providers meet their commitments.

The project team conducted interviews with nine service providers, five of which delivered low-income program services to one or more COUs. Their experiences and recommendations included:

- Working with COUs – All the CAP agencies worked with some, but not all of the COUs where there was an identified overlap between the CAP service territory and the COU service territory. Some of the agencies were very proactive and worked with multiple COUs. Those CAP agencies delivered only WAP add-on services to some COUs and a more complete set of services to other COUs, depending on the size of the COU budget and the willingness of the COU to engage in innovative service delivery procedures. Other agencies only delivered WAP add-on services to one or two COUs.
- Compensation – In general, CAP agencies were more effective when the COUs were willing to invest in the delivery of comprehensive services to low-income households. Those agencies developed systematic procedures for ensuring that all COU program funds were spent each year, including both those COUs that had only a few hundred dollars for low-income programs and those that had as much as $50,000 to spend on those program services. CAP agencies were less effective when the COU compensation was the cost of the installed measure plus a 10

percent or less administrative fee. One innovative approach was taken by Moorhead Public Service where they ask West Central CAP to identify the homes that need certain appliances, and then the utility takes responsibility for delivery of the appliances and pays West Central 10 percent of the cost of the identified appliances.

The CAP agencies recommended that the Department work with COUs to give them a better understanding of the advantages offered by collaborating with WAP service providers, but also to alert them to the costs of delivering electric energy efficiency measures even when the WAP program is already delivering service to the home.

5.3 Recommendations for COU Policies and Procedures

Our assessment of the COU low-income programs has found that COUs have implemented a diverse array of low-income programs. In some cases, the WAP service provider working with the COU has worked proactively with the COU to identify opportunities for the COUs to serve their low-income customers. In other cases, the COU has identified some innovative ways to serve low-income customers and low-income communities. The COU Low-Income Program Assessment Report furnishes more detailed information about the specific programs that have been implemented.

This analysis finds that the Department can work with COUs to increase the effectiveness and efficiency of COU low-income programs in the following ways.

- Compliance and Flexibility – The interviews with the COU aggregators and COUs found that the COUs intend to meet the low-income spending requirement. In that context, the Department can hold COUs responsible for meeting their low-income spending requirement if it considers adding some flexibility to the requirements, including:
    - Giving the COU more flexibility in what is considered low-income spending (e.g., common area lighting for Section 8 housing, early retirement of inefficient appliances, delivering services to community organizations that target low-income households).
    - Allowing the COU to carry-forward excess low-income spending from one year to count toward the low-income spending requirement for the next.
    - Allowing the COU, at its option, to develop a three-year spending plan that would allow the COU to focus staff time on low-income programs more effectively.
- Partnership – The aggregators and COUs would like the Department to take a more active role in helping to ensure that WAP service delivery agencies meet their commitments to deliver COU services. At the same time the WAP service delivery agencies would like the Department to help the COUs to understand the full cost of delivering services in collaboration with WAP.
- Information Dissemination – The aggregators and the COUs think that it is important for them to hear about the successful program models implemented by other COUs so that they can consider replication. Examples from this study that might be appropriate include SEMCAC's work with the Dairyland Power Coop members, Moorhead Public Service's partnership with West Central CAP where the CAP identifies the needed appliances and the utility arranges for

their delivery, and the Alexandria Light & Power program that works with their local Habitat for Humanity affiliate.

- Program Collaboration – The aggregators and the COUs should be made aware of the EAP Energy Related Repair (ERR) program and the EAP Proactive A16 program. Both of those programs deliver services to low-income customers of COUs and there are ways that the COU could adapt their low-income programs to enhance the services offered by those EAP programs.

In addition to encouraging COUs to undertake the initiatives outlined above, it also will be important for the Department to alert the COUs of recommended policies and procedures that are developed from recommended initiatives with the IOUs. These include:

- Develop a set of health and safety assessment protocols for all LI CIP programs.
- Specify a set of quality control procedures for all LI CIP programs.
- Identify which WAP protocols should be adopted by comprehensive LI CIP programs that serve housing units in buildings with 1-4 units and which should not.

It is not clear whether and when the Department might engage in the listed initiatives with IOUs. But, if they do, it would be appropriate to invite the COU generation and transmission associations and municipal power agencies to participate in those discussions since many of those organizations support the COUs in the development of their low-income program portfolios. And, if there are outputs from those initiatives in terms of policies and/or procedures, it would be important to find an effective way to disseminate those to COUs and their serviced providers.

Appendix A: Energy Conservation Improvement Statute 216B.241

The following are excerpts from the statute with highlighting of specific language that is important to understanding the statutory intent.

216B.241 ENERGY CONSERVATION IMPROVEMENT

Subdivision 1. Definitions. For purposes of this section and section 216B.16, subdivision 6b, the terms defined in this subdivision have the meanings given them.

(l) "Low-income programs" means energy conservation improvement programs that directly serve the needs of low-income persons, including low-income renters.

Subd. 1b. Conservation improvement by cooperative association or municipality.

(a) This subdivision applies t**o:**

(1) a cooperative electric association that provides retail service to its members;

(2) a municipality that provides electric service to retail customers; and

(3) a municipality with more than 1,000,000,000 cubic feet in annual throughput sales to natural gas to retail customers.

(b) Each cooperative electric association and municipality subject to this subdivision shall spend and invest for energy conservation improvements under this subdivision the following amounts:

(f) A generation and transmission cooperative electric association that provides energy services to cooperative electric associations that provide electric service at retail to consumers may invest in energy conservation improvements on behalf of the associations it serves and may fulfill the conservation, spending, reporting, and energy-savings goals on an aggregate basis. A municipal power agency or other not-for-profit entity that provides energy service to municipal utilities that provide electric service at retail may invest in energy conservation improvements on behalf of the municipal utilities it serves and may fulfill the conservation, spending, reporting, and energy-savings goals on an aggregate basis, under an agreement between the municipal power agency or not-for-profit entity and each municipal utility for funding the investments.

(g) Each municipality or cooperative shall file energy conservation improvement plans by June 1 on a schedule determined by order of the commissioner, but at least every three years. Plans received by June 1 must be approved or approved as modified by the commissioner by December 1 of the same year. The municipality or cooperative shall provide an evaluation to the commissioner detailing its energy conservation improvement spending and investments for the previous period. The evaluation must briefly describe each conservation program and must specify the energy savings or increased efficiency in the use of energy within the service territory of the utility or association that is the result of the spending and investments. The evaluation must analyze the cost-effectiveness of the utility's or association's conservation programs, using a list of baseline energy and capacity savings assumptions developed in consultation with the department. The commissioner shall review each evaluation and make recommendations, where appropriate, to the municipality or association to increase the effectiveness of conservation improvement activities.

Subd. 1c. Energy-saving goals. (a) The commissioner shall establish energy-saving goals for energy conservation improvement expenditures and shall evaluate an energy conservation improvement program on how well it meets the goals set.

(b) Each individual utility and association shall have an annual energy-savings goal equivalent to 1.5 percent of gross annual retail energy sales unless modified by the commissioner under paragraph (d). The savings goals must be calculated based on the most recent three-year weather-normalized average. A utility or association may elect to carry forward energy savings in excess of 1.5 percent for a year to the succeeding three calendar years, except that savings from electric utility infrastructure projects allowed under paragraph (d) may be carried forward for five years. A particular energy savings can be used only for one year's goal.

Subd. 7. Low-income programs. (a) The commissioner shall ensure that each utility and association provides low-income programs. When approving spending and energy-savings goals for low-income programs, the commissioner shall consider historic spending and participation levels, energy savings for low-income programs, and the number of low-income persons residing in the utility's service territory. A municipal utility that furnishes gas service must spend at least 0.2 percent, and a public utility furnishing gas service must spend at least 0.4 percent, of its most recent three-year average gross operating revenue from residential customers in the state on low-income programs. A utility or association that furnishes electric service must spend at least 0.1 percent of its gross operating revenue from residential customers in the state on low-income programs. *For a generation and transmission cooperative association, this requirement shall apply to each association's members' aggregate gross operating revenue from sale of electricity to residential customers in the state.* Beginning in 2010, a utility or association that furnishes electric service must spend 0.2 percent of its gross operating revenue from residential customers in the state on low-income programs.

(b) To meet the requirements of paragraph (a), a utility or association may contribute money to the energy and conservation account. An energy conservation improvement plan must state the amount, if any, of low-income energy conservation improvement funds the utility or association will contribute to the energy and conservation account. Contributions must be remitted to the commissioner by February 1 of each year.

(c) The commissioner shall establish low-income programs to utilize money contributed to the energy and conservation account under paragraph (b). In establishing low-income programs, the commissioner shall consult political subdivisions, utilities, and nonprofit and community organizations, especially organizations engaged in providing energy and weatherization assistance to low-income persons. Money contributed to the energy and conservation account under paragraph (b) must provide programs for low-income persons, including low-income renters, in the service territory of the utility or association providing the money. The commissioner shall record and report expenditures and energy savings achieved as a result of low-income programs funded through the energy and conservation account in the report required under subdivision 1c, paragraph (g). The commissioner may contract with a political subdivision, nonprofit or community organization, public utility, municipality, or cooperative electric association to implement low-income programs funded through the energy and conservation account.

(d) A utility or association may petition the commissioner to modify its required spending under paragraph (a) if the utility or association and the commissioner have been unable to expend the amount required under paragraph (a) for three consecutive years.

(e) The costs and benefits associated with any approved low-income gas or electric conservation improvement program that is not cost-effective when considering the costs and benefits to the utility may, at the discretion of the utility, be excluded from the calculation of net economic benefits for purposes of calculating the financial incentive to the utility. The energy and demand savings may, at the discretion of the utility, be applied toward the calculation of overall portfolio energy and demand savings for purposes of determining progress toward annual goals and in the financial incentive mechanism.

Appendix B: References to Utility Classification Statutes

This appendix furnishes information on the types of utilities referenced in the statute, rules, and Department communications.

DEFINITIONS

Public utility – A utility that furnishes "at retail natural, manufactured, or mixed gas or electric service to or for the public or engaged in the production and retail sales thereof" but does not include "a municipality or a cooperative electric association, organized under the provisions of chapter 308A, producing or furnishing natural, manufactured, or mixed natural gas or electric service…" (MN Statutes §216B.02, Subd. 4)

Municipal utility – Municipal distribution utilities (electric or gas) are governed by the municipality or a municipal utility commission, which regulate rates and practices; many municipal electric distribution utilities are members of municipal power agencies which provide generation and transmission services to member utilities.[9]

Cooperative electric association – Cooperatives are associations conducting business on a cooperative plan that is organized under MN Statutes §308A. According to MN Statutes §308A.101, Subd. 2, "An electric cooperative may only be formed by cooperatives engaged in the generation, transmission, and distribution of electric energy for the purpose of financing, or refinancing, the construction, improvement, expansion, acquisition, and operation of electric generating plants and electric transmission and distribution lines, systems, facilities and equipment and related facilities of its members." Cooperative electric associations are member-owned and regulated by a member-elected board of directors; rates are determined by the cooperative, unless the cooperative elects for state regulation. There are 45 distribution cooperative electric associations in Minnesota and six generation and transmission cooperative electric associations which generate and transmit electricity to their member distribution electric cooperative associations.[10]

Investor-owned utility (IOU) – A public utility organized as a private enterprise.

Community-owned utility (COU) – A municipal gas or electric distribution utility, or member utility of a cooperative electric association.

[9] Public Utilities Commission, State of Minnesota. "Municipals." Accessed August 28, 2015. (https://mn.gov/puc/consumers/help/utility/#1)

[10] Public Utilities Commission, State of Minnesota. "Cooperatives." Accessed August 28, 2015. (https://mn.gov/puc/consumers/help/utility/#1)

Table 2 displays the IOUs providing electric and gas services to customers in Minnesota.

Table 2. MN Investor-Owned Utilities

Investor-Owned Utility	Electric Services	Gas Services
CenterPoint Energy (CPE)	No	Yes
Great Plains Natural Gas	No	Yes
Greater Minnesota Natural Gas	No	Yes
Interstate Power and Light (IPL)[11]	Yes	No
Minnesota Energy Resources Corporation (MERC)	No	Yes
Minnesota Power (MP)	Yes	No
Otter Tail Power	Yes	No
Xcel Energy (Xcel)	Yes	Yes
Total IOUs	4	5

Table 3 provides the number of municipal (electric or gas) utilities and cooperative electric associations providing electric or gas services to customers in Minnesota.

Table 3. MN Community-Owned Utilities

Organization Type	Number of Organizations
Cooperative electric associations	45
Electric municipal utilities	127
Gas municipal utilities	33

Table 4 shows a breakdown of utilities by generation and transmission (G&T) power cooperative, municipal power agency, independent power cooperative, and independent municipal utility.

Table 4. MN Community-Owned Utilities by Organization Type

Organization	Electric Members	Gas Members
G&T Power Cooperatives	**48**	**0**
Dairyland Power Cooperative	3	0
East River Electric Power Cooperative	9*	0
Great River Energy	28*	0
Minnkota Power Cooperative	8	0

[11] Effective May 1, 2015, IPL's natural gas customers are served by MERC.

Organization	Electric Members	Gas Members
Municipal Power Agencies	**78**	**0**
Central MN Municipal Power Agency	12	0
Minnesota Municipal Power Agency	12	0
Missouri River Energy Services	24	0
Northern Municipal Power Agency	12	0
Southern MN Municipal Power Agency	18	0
Independent Power Cooperatives	**1**	**0**
Independent Municipal Utilities	**49**	**33**
Total COUs[12]	**172***	**33**

In addition to the aforementioned terms, the term "aggregator" is used to describe organizations involved in designing and implementing CIP programs on an aggregate basis on behalf of individual COUs. MN Statutes §216B.241 Subd. 1b, as applied to cooperative electric associations and municipal utilities providing electric services, states that generation and transmission cooperative electric associations, municipal power agencies, and other not-for-profit entities may invest in energy conservation improvements on behalf of the cooperative electric associations and municipal utilities they serve and may fulfill the conservation, spending, reporting, and energy savings goals on an aggregate basis.

Table 5 lists the CIP aggregators reporting on behalf of COUs in ESP, as well as the number of COUs utilizing the services of each CIP aggregator and the number of COUs reporting independent of the CIP aggregators.

[12] The following electric power cooperative utilities are members of both East River Electric Power Cooperative and Great River Energy: Agralite Cooperative, Meeker Cooperative Light & Power Association, Redwood Electric Cooperative, and South Central Electric Association.

Table 5. MN COU Reporting – ESP

COU Reporting in ESP	Number of Reporting Organizations
CIP Aggregators reporting in aggregate	**9**
COUs reporting through CIP Aggregator at utility-level	**113**
Central MN Municipal Power Agency	10
Dairyland Power Cooperative	3
East River Electric Power Cooperative[13]	4
Great River Energy[6, 14]	30
Minnesota Municipal Power Agency	7
Minnkota Power Cooperative/NMPA[6]	18
Missouri River Energy Services	23
Southern MN Municipal Power Agency	15
Triad (SMMPA members)	3
COUs reporting independently at utility-level	**60**
Total Reporting Organizations[15]	**182**

[13] In addition to reporting aggregate-level information for all member COUs, East River Electric Power Cooperative, Great River Energy, and Minnkota Power Cooperative/NMPA report "utility-level" information in ESP.

[14] Elk River Municipal Utilities utilizes Great River Energy as a CIP aggregator and is reported as such in ESP, but is not listed as a member of Great River Energy generation and transmission electric power cooperative.

[15] Excludes the following organizations listed in ESP which have not reported any program information: Columbia Water and Light, Darwin Electric Department, Hastings Utility Department, Northern Municipal Power Agency, and Round Lake. City of Spring Grove is included in the count of COUs reporting in ESP, but has not reported CIP program information since 2010.

Appendix C: Minnesota Rules Chapter 7690

The following are excerpts from the Rules with highlighting of specific language that is important to understanding the regulatory intent.

CHAPTER 7690, ENERGY CONSERVATION IMPROVEMENT

7690.0100 DEFINITIONS.

Subp. 3. **Low income.** "Low income" has the meaning given it in Minnesota Statutes, section 216B.241, subdivision 1b.

7690.0500 **BIENNIAL CONSERVATION IMPROVEMENT PROGRAM FILING.**

Subp. 2. Contents. The biennial conservation improvement program filing must include:

F. for each project targeted at residential consumers, an estimate of the anticipated percentage of use of each project among:

(1) low-income participants; and

(2) renters;

7690.0550 **PROGRAM STATUS REPORT.**

By April 1 of each year, an electric utility shall file with the department, and by May 1 of each year, a natural gas utility shall file with the department, a status report on each project operated during the previous year. The status report must include the following information for each project:

B. the estimate of (1) low-income and (2) renter residential customer participation levels as anticipated in the approved biennial conservation improvement program filing, and the utility's estimates of low-income participation level and renter participation level actually achieved, if applicable;

An electric or gas utility may submit its financial incentive filing to meet the requirements of the status report if the financial incentive filing includes all of the information specified in items A to E.

7690.1200 **BIENNIAL PROGRAM APPROVAL, DISAPPROVAL, MODIFICATION.**

Subpart 1. Determination of reasonable investment. The department shall determine whether a proposed program or modified program will result in reasonable investments in and expenditures for energy conservation improvements. In making this determination, the commissioner shall consider the following information, which must be included in a public utility's filing:

D. the total number of low-income and rental customers expected to be affected by the program or modified program;

E. the total number of customers within a customer class expected to participate in the program or modified program, expressed as a percentage of the total number of customers within that customer class in a utility's service area.

Appendix D: Department Communications, Instructions, and Guidance Documents

The following are excerpts from Department communications, instructions, and Guidance Documents with highlighting of specific language that is important to understanding the intent.

1 - Garvey Memo

Low Income Spending

Minnesota statute requires that all utilities devote a portion of the money spent on residential conservation improvement programs to projects that directly serve the needs of low income customers. Many utilities have asked what the Department considers an appropriate level for low income spending. Because approximately 25 percent of Minnesota households qualify for energy assistance, a good rule of thumb is that approximately 25 percent of your residential spending should be devoted to projects that serve low-income customers. The 25 percent recommendation is not a requirement and may not be appropriate for every utility; however, it should serve as a reference point when setting your CIP project budgets.

To meet the low-income spending obligation, the Department encourages utilities to: 1) partner with their local weatherization providers (often community action agencies) to provide additional funding to weatherize homes; or 2) the utility may provide specific residential CIP project(s) marketed to low-income households. For small utilities that do not have budgets that allow the utility to offer more than one project or the administrative resources to oversee separate projects directed to low income customers, these small utilities may assume that a portion of their existing residential CIP projects serve low income customers. To arrive at this estimate, use the latest census data available for the county(ies) you serve and assume that your participating customers reflect the general population. (For example, if the census found that 33 percent of the residents in your county are low-income, you may assume that 33 percent of the customers participating in your residential CIP project are also low income.)

2 - Energy Conservation Improvement Programs - Project Guide for Municipal Utilities and Electric Cooperatives

Customer Base and End-use

CIP projects can be classified in two general categories: direct and indirect. Direct projects produce measured energy and demand savings (kWh, kW or Mcf). Examples include rebates for more efficient appliances and weatherization measures. Indirect projects are those that do not produce direct savings but help educate customers about energy efficiency or may motivate them to participate in a direct savings project.

Low-income Projects

For some of these projects the estimated energy savings are higher than for the similar residential project. This is because the low-income projects involve removing an older working appliance and replacing with a much more efficient one.

Weatherization Partnership

In this project, the utility partners with the local Community Action Agency providing services under the federal Department of Energy's Weatherization Assistance Program (see Resources section for a link to the list of Minnesota providers). Services provided include: participant education, energy audits to evaluate home's energy usage, exterior wall and attic insulation, air infiltration and bypass sealing, and the testing of mechanical systems for efficiency and safety.

- Energy savings estimate: 18.9 Mcf (Source: 2001 Minnegasco Study)
- Suggested lifetime: 20 years

Heating System Replacement

In this project, the gas utility provides funding to the local weatherization provider for emergency furnace replacement.

- Estimated energy savings: 40 MCF
- Suggested lifetime: 15 years
- Above estimates are based on NEAT Audit software for a generic 1,000 sq. ft. rambler.

ENERGY STAR Appliance Replacement

Project specifically designed to replace working existing appliances. Energy saving numbers derived by comparing the annual consumption of a standard 1995 appliance to a new 2005 ENERGY STAR model.

- Refrigerators: 192 kWh annual savings
- Room air conditioners: 108 kWh annual savings
- Clothes washers: 636 kWh annual savings

Air-Conditioner Tune-Up

This Project is similar to the tune-up project listed above but focused solely on low-income clients. Typically the provider contracts with a HVAC company to provide the service.

- Energy savings estimate: 100 kWh
- Demand savings estimate: 0.2 kW
- Suggested lifetime: 15 years

Affordable Housing Partnership

The primary objective of the project is to improve the energy efficiency of affordable housing built in Minnesota, including improvements to the building envelope, HVAC, lighting and appliances. The project can be tailored for the specific community but generally consists of a combination of residential natural gas and electric direct-impact measures described above. The typical project is administered in conjunction with a non-profit housing organization such as Habitat for Humanity and can be counted towards the utilities low-income spending category. Typically the utility pays for the difference between standard and energy efficient measures such as:

- Heating system
- Water heater and other measures such as a GFX
- Appliances (refrigerator, dishwasher, etc.)
- ENERGY STAR lighting fixtures

3 - CIP Policy Guidelines: Low-Income Programming in Multifamily Buildings with 5+ Units

Policy Guidelines

Historically, utilities have partnered with U.S Department of Energy (DOE) Weatherization Assistance Program (WAP) providers in the state. The benefit of this practice has been that CIP funds can leverage WAP funds, thus resulting in the installation of more energy efficiency measures at a property by providing more funds than would otherwise be available. However, there are often opportunities, especially in multifamily rental properties, to install energy efficiency measures independently of the WAP.

There are several standards for establishing LI status that are used by different programs. This guidance does not choose one definition or create a new definition of LI but makes use of several existing standards that DER finds reasonable. This guidance demonstrates how utilities should use resources associated with existing LI programs, specifically WAP and affordable housing programs, to verify that LI households occupy a reasonable threshold of the units in a multifamily building. The mechanisms strive to demonstrate LI occupancy while not requiring utilities or CIP program administrators to handle any tenant personal and financial information. Because the existing affordable housing programs listed in this guidance document by their nature ensure long-term affordability of a property, utilities may require that asset investments and improvements in these buildings stay with the building regardless of resident turnover or change in property management or ownership.

While there are several definitions of multifamily depending on the context, this guidance pertains to multifamily properties that contain five or more housing units. This guidance is based on demonstrating that a threshold of units in a single building is occupied by low-income households. For the purpose of CIP LI spending, buildings with five or more units must have at least 66 percent of the units occupied by LI households. If a building meets this threshold of occupancy by LI citizens, 100 percent of the building can be considered LI for the purpose of CIP programs. (Footnote: For the purpose of this guidance, the world building is used for readability. Building generally means a single structure.)

One of the goals of CIP is to achieve energy savings through actions that have direct, measureable energy savings. For practical purposes, utilities will need to be able to track energy savings to a specific utility meter or account. However, in affordable housing regulation, housing “properties” or “projects” may consist of multiple adjacent or scattered buildings. Utilities will need to be aware of this factor when arrangement, they are advised to document and report them to the DER CIP unit in order to improve future versions of this guidance.

Utilities have a responsibility to use CIP funds cost-effectively, to meet all CIP statutory obligations, and to offer a broad enough portfolio of CIP programs so that all customer classes have access to CIP programming. This guidance is not intended to imply that a property owner is automatically entitled to CIP funding if LI households occupy 66 percent of the units in their property. Utilities may set reasonable program eligibility guidelines to balance all the priorities listed above. DER is interested in efforts to increase the cost-effectiveness of LI CIP programming in general and is committed to working with utilities and CIP program administrators toward this goal.

Utilities may work with property owners and DER to use one or a combination of the following conditions to demonstrate that LI households occupy the appropriate threshold of units within a building in order to qualify the entire building for LI spending.

1. Weatherization Assistance Program Lists:

Guidance: The U.S Department of Energy (DOE) publishes lists of multifamily rental properties that are prequalified for the WAP based on tenant income data collected annually by the federal government. U.S. Department of Housing and Urban Development (HUD) and the U.S. Department of Agriculture (USDA) identify eligible multi-family properties to be included on these lists. Any building on the current DOE list is eligible for CIP LI spending.

Documentation: Utilities may retain a printed or electronic copy of the WAP list with the listed property to demonstrate that the building qualifies for LI spending.

2. Low Income Renter Certification:

Guidance: Minnesota statutes allow rental properties subsidized under a federal or state government program or meeting certain rent and income restrictions to be taxed at a lower rate. Property owners apply to the Minnesota Housing Finance Agency (MN Housing) for Low Income Rental Classification (LIRC) and MN Housing provides certification to local assessors that a property qualifies. MN Housing compiles a LIRC Assessor Report annually, in May, of all properties that have LIRC status. The LIRC Assessor Report indicates the portion of low-income units in a property.

Documentation: Utilities may retain a copy of the LIRC Assessor Report with the listed property to demonstrate that the building qualifies for LI spending.

a. Some properties listed on the LIRC Assessor Report are composed of multiple buildings. CIP program administrators will need to work with property owners and DER in such cases to determine methods for documenting the threshold of LI households in an individual building.

3. Use Restriction:

Guidance: Some affordable housing programs require, as a condition of receiving funding, the property owner site a declaration against the property requiring that a portion of the units will be rented to tenants with an annual income of less than or equal to 60 percent of area median income.

Documentation: Utilities may use copies of a use restriction that is declared against the property listing the income restrictions on the property to demonstrate that a building qualifies for LI spending.

4 - CIP Policy Guidelines: Energy Savings from Delivered Fuels

POLICY GUIDELINES

In an effort to address the issues described by the MEI process and to support additional opportunities to realize energy savings, the Division of Energy Resources (DER) is providing the following guidance. Electric utilities may provide direct space heating and domestic hot water energy savings measures to low-income delivered fuel customers and low-income small gas municipal utility customers offered in conjunction with the Weatherization Assistance Program. Utilities may claim the energy savings from those measures towards their CIP energy saving goals.

Examples of potential measures include, but are not limited to the following:

Thermal Efficiency Improvements:

- Attic insulation
- Wall insulation
- Foundation insulation
- Rim joist insulation
- Air sealing reduction

Mechanical Upgrades:

- Furnace replacement
- Water heater replacement
- Set back thermostat

Water Heating Improvements:

- Low flow showerhead
- Faucet aerators
- Pipe wrap
- Temperature set back
- Drain water heat recovery unit

5 - Minnesota Utility 2016 CIP Reporting Instructions for Cooperatives and Municipal Utilities

Entering Numerical Program Data

Fill out the remaining information below.

As previously communicated by the Department, the Minnesota Technical Reference Manual v2.0 is the default source of approved savings calculation methods for 2015. V2.0 should be used for 2017.

Entering Low Income Participation and Budget %

Low Income Participation % and Budget % are either fixed at 100%, user-specified, or fixed at 0%.

For programs in a low-income program category, the fields are fixed at 100%.

For programs in a residential program category, Other – Direct, Other – Indirect, or the Multifamily category, the fields are user-specified.

Where the figures are user-specified, actual low-income participation data may be used if available, or estimated low income participation data from 2010 US Census data may be used. In the Reference branch under My View, there is a table of low income household percentage by county in the file "Percent Low Income Households by County-2010.xlsx". This information is also provided in Table 7 of the Appendix of this document. If your utility covers multiple counties, please use a weighted average of the low-income percentages in each county.

For programs in a non-residential program category, the fields are fixed at 0%.

Entering Delivered Fuel Savings

Electric utilities may count equivalent kWh savings from heating fuel (fuel oil no. 2, LPG, and natural gas) savings achieved in low income programs under certain conditions. Please refer to the Department's guidelines for Energy Savings from Delivered Fuels.

Table 6. Program Category Descriptions

Program Category	Description
Indirect Low Income	Programs serving low income customers that do not result in direct energy savings.
Low Income Weatherization	Utility funding assistance for the federal Weatherization Assistance Program. Includes shell measures, lighting, and replacement of furnaces, boilers, and water heaters. Electric utilities may claim equivalent kWh savings for propane and fuel oil savings.
Specialty Low Income	Specialty direct-savings programs for low income customers.

Table 7. Percentage of Households with Less Than 50% of State Median Income in 2010 by County (May be used for 2014 CIP results and 2016 CIP plans)

County	Percent	County	Percent	County	Percent
Aitkin	34.7%	Isanti	19.1%	Pipestone	35.4%
Anoka	15.5%	Itasca	31.4%	Polk	30.5%
Becker	30.3%	Jackson	27.8%	Pope	27.8%
Beltrami	34.8%	Kanabec	27.2%	Ramsey	26.7%
Benton	26.8%	Kandiyohi	27.8%	Red Lake	28.4%
Big Stone	34.0%	Kittson	28.9%	Redwood	32.2%
Blue Earth	29.0%	Koochiching	37.6%	Renville	29.5%
Brown	27.1%	Lac qui Parle	27.9%	Rice	22.0%
Carlton	26.1%	Lake	30.6%	Rock	29.8%
Carver	12.8%	Lake of the Woods	27.2%	Roseau	23.4%
Cass	31.7%	Le Sueur	20.4%	St. Louis	32.7%
Chippewa	30.6%	Lincoln	31.3%	Scott	10.8%
Chisago	16.1%	Lyon	29.9%	Sherburne	14.9%
Clay	28.9%	McLeod	21.3%	Sibley	24.7%
Clearwater	36.0%	Mahnomen	35.5%	Stearns	25.9%
Cook	28.0%	Marshall	25.9%	Steele	23.3%
Cottonwood	33.0%	Martin	31.2%	Stevens	31.0%
Crow Wing	30.5%	Meeker	24.8%	Swift	35.3%
Dakota	14.5%	Mille Lacs	30.8%	Todd	32.2%
Dodge	17.5%	Morrison	29.6%	Traverse	34.1%
Douglas	29.8%	Mower	31.5%	Wabasha	26.1%
Faribault	35.0%	Murray	30.1%	Wadena	41.4%
Fillmore	29.6%	Nicollet	20.7%	Waseca	24.9%
Freeborn	32.5%	Nobles	33.9%	Washington	13.0%
Goodhue	24.6%	Norman	34.0%	Watonwan	29.7%
Grant	33.2%	Olmsted	19.1%	Wilkin	23.6%
Hennepin	22.5%	Otter Tail	31.6%	Winona	33.2%
Houston	29.2%	Pennington	32.7%	Wright	15.9%
Hubbard	30.4%	Pine	30.6%	Yellow Medicine	28.9%

Source: 2010 U.S. Census data.