Low-Income CIP Spending Requirements

Regulatory and Policy Analysis for IOUs
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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.

Table of Contents

List of Tables

Acronyms

C&I – Commercial and Industrial

CAP – Community Action Partnership

CIP – Conservation Improvement Program

COU – Community-Owned Utility

CPE – CenterPoint Energy

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

GPNG – Great Plains Natural Gas

GMG – Greater Minnesota Gas

HES – Home Energy Squad

HESP – Home Energy Savings program

HHS – United States Department of Health and Human Services

LI – Low Income

LI-CIP – Low-Income Conservation Improvement Program

LI-HES – Low Income Home Energy Squad

LIHEAP – Low income Home Energy Assistance program

LIRC – Low Income Rental Certification

MERC – Minnesota Energy Resources Corporation

MESP – Multi-Family Energy Savings program

MNP – Minnesota Power

NEAT – National Energy Audit Tool

OTP – Otter Tail Power

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 programs implemented by the utilities as part of their Conservation Improvement Program (CIP) responsibilities. To complete this study the project team developed an in-depth understanding of the CIP low-income program (LI CIP) requirements and how the current set of low-income programs fulfill those requirements. Using the findings from this analysis the project team identified ways that changes to policies and procedures might result in improved efficiency and effectiveness of the investor-owned utility (IOU) 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 IOU Programs* that reviewed the design and implementation of IOU low-income programs and the performance of those programs. This report focuses on policies and procedures for natural gas and electric IOUs. A companion report furnishes information on policies and procedures for Community Owned Utilities (i.e., cooperatives and municipal utilities).

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 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.

- Rules – The Rules were promulgated prior to recent statutory updates and the Commissioner has ordered IOUs to change their reporting content and schedule without updating the Rules. This has led to some uncertainty about what is required in IOU Plans and Status Reports.
- Commissioner's Orders/Decisions – The Commissioner periodically issues Orders in the context of IOU 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 guidance on two issues related to CIP program design. These guidance documents addressed important program barriers and have been important for program innovation. 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 IOUs.

Analysis of IOU filings demonstrates that the IOUs are fulfilling the CIP low-income spending requirements and developing effective programs for serving low-income persons. However, in-depth interviews with IOUs and program service providers demonstrate that having clearer policies with better communications would be likely to increase program efficiency and effectiveness.

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 - IOUs 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 - IOUs are required to file a prospective Triennial Plan and Annual Status Reports that include information on their low-income programs and their compliance with the low-income spending requirements.
- Compliance - Department staff review all IOU Plans and Status Reports for compliance with low-income program guidelines and the low-income spending requirements, and publish a Decision 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 – The Department's policy with respect to an IOU that fails to fulfill its low-income spending requirement is unclear. In one case, an IOU that failed to spend the required amount was ordered to spend an additional amount in the next program year. In another case, an IOU that failed to spend the required amount was allowed to count spending on verified low-income customers that participated in residential segment programs.
- Qualified Spending – The Department's policy is inconsistent with respect to specifying what types of spending on low-income customers should be counted toward the IOU's spending requirement. Three types of spending include: special incentives granted to low-income customers or buildings as part of low-income segment programs, special incentives granted to verified low-income customers or buildings as part of residential or commercial segment programs, and regular incentives (i.e., available to all customers) granted to verified low-income customers or buildings as part of residential or commercial segment programs.
- 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 – Prior to the submission of the 2017-2019 Triennial Plans, IOUs were inconsistent in their reporting on the participation of low-income customers and renters in residential and commercial segment programs. As part of the Department's review of the 2017-2019 Plans, the Department did require IOUs to furnish such information.

Resolving these ambiguities would make it easier for IOUs to comply with requirements and for Department staff to complete their reviews.

Guidelines for Low-Income Program Design and Implementation

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. However, the Department has accepted other procedures proposed by IOUs.
- 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. In approving low-income programs that co-fund services delivered with WAP funding, the Department is tacitly accepting the WAP guidelines on eligible buildings for those programs. The Department also has issued guidance on when spending on a multifamily building can be considered eligible low-income spending.
- 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. Since the Department reviews and approves the measures proposed for each CIP program, it would be possible to develop such a list by reviewing IOU plans for all low-income programs. However, that only would furnish a list of what has been approved, rather than a list of what would be approved if proposed by an IOU.
- 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 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 all IOU low-income programs should 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

[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 not established a consistent set of procedures that all IOU low-income CIP programs should 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. However, the Department allows utilities to propose alternative procedures for developing estimates of energy savings. The Department does not specify any other Measurement and Verification procedures for CIP low-income programs.
- 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 furnished guidance, either in terms of recommendations or requirements related to the evaluation of CIP low-income programs.

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 IOU programs are implemented and some uncertainty about whether the Department has identified best practices that should be implemented in all IOU programs.

Findings and Recommendations

The statute gives the Commissioner broad powers to specify CIP policies and procedures. However, compared to other jurisdictions, the Department policies and procedures on the low-income spending requirement have focused more on obtaining comprehensive information from IOUs about their program plans and accomplishments, and less on developing detailed specifications for the design and implementation of low-income programs. The outcome of the Department’s approach has been very positive from the perspective of the amount of innovation that the IOUs have shown in the development of different program models and approaches. However, that approach also has resulted in some lack of clarity with respect to specific policies and, more importantly, has failed to ensure that some important program issues are addressed in a consistent way by the IOUs.

Our review of the LI CIP policies and procedures found that the policies and procedures are usually clear and consistent, and that in most cases the IOU program managers have a good understanding of what is required. The areas where there is some lack of clarity include:

- Verified Low-Income Participation in Programs in Other Segments – It is not clear whether an IOU should count spending on verified low-income customers when the programs are implemented in other segments.
- Requirement for Landlord Contributions – Among the approved IOU low-income programs there are significant differences in whether landlords are asked to contribute to the cost of program measures and in the amount that they are expected to contribute.

- Definition of “Low-Income Persons” – Among the approved IOUs low-income programs and in the guidance issued by the Department on multifamily buildings, there are some important differences in the definition of a low-income person.
- WAP Protocols on Health and Safety, Measure Selection, and Quality Control – Some IOU programs work with WAP service delivery agencies and at least one other program implemented by a non-WAP service provider has been ordered to follow WAP guidelines. It is unclear whether all IOU programs that deliver comprehensive services to single family homes should be following those same standards.

The study also identified gaps in the current set of policies and procedures that should be addressed to ensure that the programs better serve low-income households. We recommend that the highest priority for the Department is to work toward the development of LI CIP policies and procedures that are focused on program integrity issues through a collaborative process with the Department WAP and EAP units, along with the IOUs, service providers, and other interested parties. These include:

- At a minimum, develop a set of health and safety assessment protocols for all low-income programs that deliver comprehensive services. In addition, consider whether there are health and safety issues related to other programs being implemented by IOUs.
- Specify a set of quality control procedures for all LI CIP programs. In particular, consider how IOU programs can make use of quality control conducted by the Department’s WAP program office and whether third-party inspections should be required to ensure independence in the quality control process.
- Identify which WAP protocols should be adopted by comprehensive LI CIP programs and which should be considered by IOUs but do not represent an important minimum standard for programs.
- Set standards for IOU M&V activities and evaluations, and develop recommendations on programs for which joint evaluations should be conducted.

These recommended activities are listed in order of priority. Some of these recommended initiatives, particularly the health and safety assessment protocols and the quality control procedures, might be relatively straight forward to complete since the study found that all programs have health and safety assessment protocols and quality control procedures, but that those protocols and procedures need to be reviewed for consistency and to be better documented.

We also recommend that the Department undertake two other initiatives to improve LI CIP policies and procedures.

- The first recommendation is that the Department consider whether it is appropriate to ensure that low-income market actors are treated consistently across the different IOU programs. If so, the Department might initiate a process by which a consistent policy could be developed.
- The second recommendation and longer-term suggestion is that the Department review the new information developed from these studies to consider whether it is time to update the

Statute to better address the needs of the low-income market. In particular, it might be appropriate to give the Department the responsibility to review whether the IOU programs are effectively serving the needs of low-income renters.

These initiatives are targeted to adapting the LI CIP regulatory framework to innovations in the low-income energy efficiency field that have been implemented in the time since the low-income spending requirement was promulgated.

More generally, we recommend that the Department work to improve their communications related to low-income CIP programming.

- When the Department makes a decision with respect to low-income program policies or procedures, either in the context of an IOU filing or another discussion with an IOU, that information should be proactively communicated to all IOUs.
- The Department's CIP unit should communicate all such decisions to the WAP and EAP units who in turn should inform their service delivery agencies of the decision and how that decision might affect the agency's work with IOU low-income CIP programs.
- When the Department's WAP or EAP units update a policy or procedure for their programs that might affect the delivery of CIP low-income program services, they should communicate that information to the Department's CIP unit who in turn should inform the IOUs of these policy changes and how they might affect the IOU's work with WAP or EAP service providers, or with low-income households or buildings.

It may be challenging and time-consuming to maintain these lines of communication. However, they are critical to ensuring that all parties are working most effectively toward the overarching goal of serving low-income customers and buildings.

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 programs implemented by the utilities as part of their Conservation Improvement Program (CIP) responsibilities. One important focus of this study is to consider how to increase the effectiveness of collaboration between the publicly-funded and ratepayer-funded programs so that they are jointly meeting the needs of all low-income market segments and taking advantage of the full range of effective program models. 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 the Department's 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 any inconsistencies in the way that different programs are treated under the current set of policies and procedures? Are there any 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 ways that changes to policies and procedures might result in improved efficiency and effectiveness of the IOU 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 IOU Programs* that reviewed the design and implementation of IOU low-income programs and the performance of those programs.

This report focuses on policies and procedures for natural gas and electric Investor Owned Utilities (IOUs). A companion report furnishes information on policies and procedures for Community Owned Utilities (i.e., cooperatives and municipal utilities).

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 and discussed those documents with the 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 a more complete understanding of the 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 level and at the 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 for the CIP low-income spending requirement, and identify outstanding issues related to those policies and procedures.

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

- Review of Utility Plans and Status Reports: The evaluation study included a complete review of all utility Plans and Status Reports for the 2013 and 2014 program years. In the process of conducting those reviews we identified additional information about policies and procedures that were not apparent from the initial Plan and Status Report review.
- In-Depth Interviews with Utilities and Service Providers: The evaluation study included in-depth interviews with all IOUs and a sample of service providers. Those interviews gave us a more complete understanding of IOU program design and implementation.

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 IOU 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 IOUs. 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, particularly in terms of the findings and recommendations.

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..."
- Regulatory Filings (Commissioner's Orders/Decisions) - Formal proceedings sometimes result in Commissioner Orders or Decisions that establish policies and procedures related to the low-income spending requirements. These often are issued in the context of regulatory filings, typically the review of Triennial Plans and Annual Status Reports. The Department also can independently initiate a proceeding to address an important policy issue that might result in a Commissioner Order or Decision. The Rules also allow another party to initiate a proceeding although this has not occurred to date.
- 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) - Municipal electric utilities (i.e., governed by a municipality or a municipal utility commission) and cooperative electric associations (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 Utilities (Gas COUs) - Municipal gas utilities (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 - "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."

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 Status Reports that the three-year average should be applied to electric GOR to determine the low-income spending requirement.

- Treatment of LI CIP Expenditures - Subd. 7(e) also offers utilities special treatment for LI CIP expenditures. Utilities are allowed to exclude the LI CIP program costs and benefits from their calculation of net economic benefits, but to count the LI CIP energy and demand savings toward annual energy savings achievements.
- 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. At this time, no utility has chosen to contribute money to the fund in lieu of delivering low-income programs independently.

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 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 IOUs 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.
- Residential vs. Commercial Spending – The statute requires that utilities spend a certain percentage of their residential revenues on low-income programs. However, many low-income households are renters in multifamily buildings. In most cases, those multifamily buildings are considered by utilities to be commercial accounts. To serve the needs of "low-income renters" by targeting energy efficiency measures to such buildings, some IOUs have implemented commercial segment programs. The statutes are silent on whether spending in commercial segment programs should be counted as contributing to the low-income program spending requirement.
- Low-Income Customers and Buildings in Other Segments – Some programs in IOU residential or business segments offer higher incentives to households or buildings that are identified as low-income. The MERC energy audit program is offered for free to low-income customers. CPE and Xcel pay higher incentives to low-income buildings that participate in their business segment Multifamily Building Efficiency Program. Since the rationale for furnishing a higher incentive or lower cost is that the customer or building is low-income, this raises a question of whether this program spending should be reported in the low-income segment, even though they are administered as part of a residential or business segment program. [Note: The Xcel Home Energy Squad Program delivers services to low-income and non-low-income customers. The cost and benefits for low-income customers are reported in the low-income segment.]

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. Appendix C includes excerpts from the Minnesota Rules Chapter 7690 with the relevant text highlighted.

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

- Program Filing - The Rules specify that IOUs are required to file a Biennial Program Plan with the Department.
  - As part of this Plan, the utility is required to furnish "an estimate of the anticipated percent of use of each project among: (1) low-income participants; and (2) renters."
- Program Status Reports - IOUs are required to file an annual program Status Report.
  - As part of this report, the utility is required to report "the utility's estimates of low-income participation level and renter participation level actually achieved..."

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 – In addition to filing Annual Status Reports, the IOUs have been asked to submit information on their programs in the Energy Savings Platform.

These changes do not fundamentally change the purpose and the effectiveness of the Rules. However, since the filing procedures specified by the Rules and those implemented in practice are somewhat different, it is challenging for interested parties to understand filing procedures.

2.3 Commissioner's Orders/Decisions

Formal proceedings sometimes result in Commissioner Orders or Decisions 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.[2] As such, those proceedings offer clearer guidance with respect to CIP regulations.

2.3.1 Low-Income Spending Requirement Baseline

The Statute (216B.241 Subd. 7) specifies that the LI CIP natural gas 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. In reviews of the 2013 Status Reports, the Department included a discussion of the three-year average, documented the effect of moving from the residential GOR to the three-year average of the residential GOR, and recommended that the Commissioner approve use of the three-year average on a prospective basis beginning in 2015 for both natural gas and electric utilities. In their Reply Comments to Staff's Proposed Decision regarding their 2013 Status Report filing (Docket No. E015/CIP-10-526.03), Minnesota Power objected to the use of the three-year average of residential GOR for electric utilities. In the Decision concerning the 2013 Status Report for all utilities, the Commissioner stated the requirement for electric utilities to use the three-year average is a reasonable interpretation of the statute and that there are a number of benefits to doing so. Further, the Commissioner noted in Decision concerning Minnesota Power’s 2013 Status Report that the utility did not provide any evidence that ratepayers or Minnesota Power would be harmed by applying this procedure.

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, it does not furnish guidance on what should happen when an IOU does not spend the required amount. And, it does not explicitly indicate whether verified participation of low-income persons in CIP programs counts toward the low-income spending requirement.

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

Three utility filings furnish information on different ways that this has been addressed in Commissioner Orders. These examples suggest that the Commissioner is willing to look beyond a strict interpretation of the statute to assess whether the utility's Status Report indicates the utility's overall CIP portfolio has effectively served low-income persons at a level that is consistent with the LI CIP spending requirements. However, this example also leaves ambiguity as to whether a CIP policy has been established.

2010 Interstate Power and Light Order

Interstate Power and Light's (IPL) 2010 Status Report (Docket No. E,G001/CIP-09-636.01) showed that IPL spent $16,210 less than required on electric LI CIP programs and that IPL spent $10,166 more than required on gas LI CIP programs. The Commissioner ordered IPL to "submit a compliance filing within 60 days" that would include "A plan to spend an additional $16,210 in electric low-income funding in 2011 and 2012..." Note that utilities that provide both electricity and natural gas are technically considered two utilities in terms of rate regulation. The fact that IPL spent more than required on their gas LI CIP programs was not taken into account in the decision regarding their electric spending shortfall.

2014 Interstate Power and Light Order

Four years later, IPL's 2014 Status Report (Docket No. E,G001/CIP-09-12-484.02) showed that IPL spent $15,158 more than required on electric LI CIP programs and that IPL spent $8,047 less than required on gas LI CIP programs. In this case, the Commissioner approved the Status Report and did not require IPL to spend more on their gas LI CIP in future years to account for the failure to meet the gas LI CIP spending requirements in 2014. However, since this decision was made at the time that IPL was finalizing the sale of their Minnesota assets, it is not clear whether this decision represents Department policy about spending shortfalls, or a pragmatic decision to give the new owner of IPL's assets a "clean slate" with respect to CIP and LI CIP responsibilities.

2014 CPE Status Report Order

CenterPoint Energy's (CPE) 2014 Status Report (Docket No. G008/CI-12-564.03) showed that CPE fell short of its required low-income spending. DER staff analysis noted that CPE's spending fell short of its goals for the low-income segment, but noted that this was due in part to a disruption in the Low-Income Weatherization project largely beyond the utility's control. Staff analysis included two methods of calculating low-income spending. One method considered only spending in the low-income segment and a second method considered spending in the low-income segment as well as documented spending on low-income persons in the residential segment. Staff then reported that "CPE's actual low-income expenditures in 2014 exceeded the minimum low-income spending requirement." The Commissioner approved this conclusion.

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. IOUs 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.

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. Many IOUs fund a low-income program that pays for individual energy efficiency measures delivered to low-income households that are participating in WAP. However, Xcel, MERC, and Greater Minnesota Gas each fund a low-income program that is implemented by contractors that are not WAP service providers. The guidance on whether these programs should follow WAP protocols is unclear. As outlined below, the MERC program was ordered to follow WAP protocols. However, our review of filings by Xcel and Greater Minnesota Gas do not find similar stipulations for those programs.

2011 Minnesota Energy Resources Corporation Order

In 2011, Minnesota Energy Resources Cooperation (MERC) proposed a modification to its approved residential segment Plan for 2010-2012 (Docket No. G007/CIP-09-803). That modification proposed to add a “limited income” program – 4U2 - to the residential segment that would serve customers who were not income-eligible for their low-income weatherization program, but had incomes at or below

300 percent of the poverty line. The Commissioner's Order dated 6/1/2011, the Commissioner approved the proposed program modification , but stipulated that the program must use the Weatherization Assistant tool to determine savings and follow any and all WAP protocols regarding health and safety standards.

In subsequent filings, the 4U2 program moved into the low-income segment. [See discussion above related to moderate-income customers.] In those filings, MERC commits to use the Weatherization Assistant tool and to follow WAP protocols regarding health and safety standards. As such, the Commissioner's Orders on those filings did not need to stipulate those program conditions.

2.3.5 Reporting of Estimated Low-Income Participation

Review of the filings associated with the 2013-2015 IOU Triennial Plans and 2014 Status Reports show that some IOUs meet the requirement listed in the Rules to report on the anticipated and actual participation levels by low-income customers and renters in each program while other IOUs do not. The Decisions in those dockets have not commented on this aspect of IOU reporting.

In more recent filings, DER Staff have required utilities to report this information if it was not provided. See Docket G008/CIP-12-564.03 in which CPE reported on participation and Docket E, G002/CIP-12-447.07 in which Xcel did not report on participation. In Xcel's 2017-2019 Triennial Plan filing (Docket E, G002/CIP-16-115), the Department requested and Xcel provided estimates.

2.3.6 Landlord Contributions for Rental Units

In its 2017-2019 Triennial Plan, Xcel proposed to expand its Home Energy Savings Program [HESP] from single family homes to buildings with 1-4 housing units. In part of Xcel's service territory, HESP is delivered by WAP service providers. Since most of those service providers deliver WAP to buildings with 1-4 housing units, this change in Xcel's program will allow the WAP service providers to deliver Xcel HESP services as an add-on to all of their units, not just to the single family homes that they serve. As part of the Plan, Xcel proposed to follow WAP protocols and allow the local service provider (both WAP and non-WAP) to determine whether a contribution toward the cost of services should be requested from the landlord.

The Commissioner's Order on the Triennial Plan stipulated that, where the landlord pays for the costs of energy associated with a particular measure, the landlord should pay for 50 percent of the cost of the measure. While this is a reasonable requirement for this program, it is not consistent with the policies that govern other, similar, IOU LI CIP programs. For example, CPE's low-income weatherization program description states that the utility expects the landlord "to contribute to the cost of services unless specific circumstances warrant an exception." And, for the CPE Rental Efficiency Program, the property owner is asked to pay 50 percent of the cost of all measures unless the property owner can prove financial hardship, even when the low-income customer pays the energy bill directly to the utility.

2.3.7 Summary of Findings on Commissioner Orders

Unless an Order or Decision by the Commissioner explicitly states that it affects all utilities, one can only be confident that it applies to the subject utility. In the case of the Minnesota Power challenge to the use of the three-year average, the Commissioner's Decision rejected their challenge. As such, it would be expected that the Commissioner would reject other such challenges. However, in the case of MERC's request to fund a low-income segment program that serves customers up to 300% of poverty, it is only clear that the Commissioner accepted MERC's program – it is not clear whether the Commissioner would accept such a program from other IOUs. Similarly, the Decisions with respect to IOU shortfalls of spending requirements show that the Commissioner is likely to make a decision based on the specific circumstances related to each Status Report. Finally, the Xcel Order with respect to landlord contributions does not appear to be consistent with the programs implemented by other IOUs.

Commissioner Orders made in the context of an individual IOU filing are an important part of the regulatory framework. They give the Department the opportunity to furnish clear and direct guidance to an IOU regarding the design and implementation of their low-income program(s). In addition, all Orders are maintained in a system that allows for future reference.

However, these orders can lead to two types of problems.

- Consistency with Other IOU Programs – It is difficult for Department staff to have information about whether and how an issue is addressed in similar programs implemented by other IOUs. As such, it is challenging for the Commissioner to develop a consistent set of LI CIP policies and procedures when reviewing one IOU filing at a time.
- Information for Other IOU Programs – It is difficult for IOUs to become aware of decisions that are made in the context of filings for other IOUs. And, even if they are aware of a Commissioner's decision, they have no way of knowing whether that means that they can implement a similar policy.

While Orders in the context of IOU CIP filings are necessary and appropriate, they are probably a relatively poor tool for making decisions on overarching LI CIP policies and procedures.

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 Multifamily Buildings with 5+ Units[3]

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 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).

2.4.2 Energy Savings from Delivered Fuels[4]

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."

2.4.3 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. For example, Xcel, CPE, and MERC all have multifamily building programs that use the guidance exactly as outlined by the Department. Their program filings reference the guidance to document how they are identifying low-income buildings. That leads to clear and consistent guidelines across IOU programs.

[3] http://mn.gov/commerce-stat/pdfs/conserve-prog-low-income-guide.pdf
[4] http://mn.gov/commerce-stat/pdfs/conserve-prog-delivered-fuels.pdf

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 as show in Table 1.

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

Type of Utility	Low-Income Spending Requirement Percentage
Electric IOU	0.2%
Gas IOU	0.4%

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 IOUs.

3.2.1 Dedicated Low-Income Spending

Historically, IOUs have spent the required low-income spending amount on programs that exclusively serve low-income customers, referred to as dedicated low-income programs. In practice, the Triennial Plans submitted by the IOUs show how the IOU plans to meet the low-income spending requirements through one or more dedicated low-income programs in the low-income segment of the utility's CIP Plan.

However, several decisions by the Department in recent years raise doubt about whether CIP policy is consistent in this area.

- In the Order related to the 2014 CPE Status Report, CPE did not meet the CIP low-income spending requirement with dedicated programs. However, CPE was determined to have met their spending requirement because CPE verified spending on low-income customers in their residential programs.
- In their 2017-2019 Triennial Plan filing, CPE demonstrated how it will meet the spending requirement with programs in the low-income segment, but also stated that is plans to count spending on low-income customers in other segments as well. The Department did not comment on that assertion in its approval of the utility's Triennial Plan.

Given these decisions, it is unclear whether the Department's policy is that the low-income spending requirement should be met with spending on dedicated low-income programs or should include all programs that are documented to serve low-income customers.

3.2.2 Spending on Multifamily Programs

The Department guidance on Multifamily Buildings with 5+ Units states that certain buildings "can be considered LI for the purpose of CIP programs." Based on other language in the guidance, it seems that the Department expected that utilities who were implementing such multifamily programs would count those expenditures toward their LI CIP spending requirement. However, the utilities are not consistent in the way that they report on these multifamily programs and this inconsistency reveals additional ambiguity about whether the Department's policy is that the low-income spending requirement should be met with spending on dedicated low-income programs or should include all programs that are documented to serve low-income customers.

Xcel

Xcel funds two different multifamily programs: the Multifamily Energy Savings Program delivers energy efficiency measures to units within the multifamily building, and the Multifamily Building Efficiency Program delivers whole-building and unit-level energy efficiency measures.

- Multifamily Energy Savings Program - This is a low-income segment program that is counted toward Xcel's low-income spending requirement.

- Multifamily Building Efficiency Program - This is a commercial segment program, developed in partnership with CPE, in which low-income buildings receive a higher incentive than the other buildings. Xcel does not include the spending on low-income buildings in their low-income spending calculations.

CPE

CPE funds two different multifamily programs: the Low-Income Multifamily Housing Rebates Program delivers building-level energy efficiency measures, and the Multifamily Building Efficiency Program delivers comprehensive building energy efficiency measures at both the building-level and to individual apartments.

- Low-Income Multifamily Housing Rebates Program - This is a low-income segment program that is counted toward CPE's CIP low-income spending requirement.
- Multifamily Building Efficiency Program - This is a commercial segment program, developed in partnership with Xcel, in which low-income buildings receive a higher incentive than the other buildings. CPE does not include the spending on low-income buildings in their Plans for meeting the low-income spending calculations, but proposes to count that spending as part of their low-income spending calculations for their Status Reports.

MERC

MERC funds the Multifamily Direct Install Plus Program that delivers energy efficiency measures to units within multifamily buildings. This is a commercial segment program in which low-income buildings receive a higher incentive than the other buildings. MERC does not include the spending on low-income buildings in their Plans for meeting the low-income spending calculations, but proposes to count that spending as part of their low-income spending calculations for their Status Reports.

Summary of Findings

In their commercial segment multifamily programs, Xcel, CPE, and MERC each offer higher incentives for verified low-income buildings even though those programs are not part of the low-income program segment. In their 2017-2019 Plan, MERC states that they will report the spending on low-income buildings, but do not say that they will count that spending toward their low-income spending requirements. In their 2017-21019 Plan, CPE reports that they will report that spending and will count that spending toward their low-income spending requirement. Table 2 summarizes this information on the low-income multifamily building programs.

Table 2. Treatment of Low-Income Multifamily Program Spending

Program	Segment	Spending Counted as Low-Income in Triennial Plan	Spending Counted as Low-Income in Annual Status Report
Xcel MESP	Low Income	Yes	Yes
Xcel Multifamily Building Efficiency	Commercial	No	No
CPE Low Income Multifamily Buildings	Low Income	Yes	Yes
CPE Multifamily Building Efficiency	Commercial	No	Yes
MERC Multifamily Direct Install Plus	Commercial	No	No

The introduction of commercial segment multifamily programs with higher incentives for low-income buildings has blurred the line between low-income and market rate programs and introduces ambiguity as to whether the low-income spending requirement must be met through a low-income segment made up of dedicated low-income programs or whether the low-income spending requirement can be met through a variety of programs and segments. Inconsistencies in how utilities have proposed to report on planned and actual low-income spending in these programs also reveals inconsistencies and a lack of guidance from the Department.

3.2.3 Summary of Policy Related to Qualified Spending

Department policy explicitly includes the following as qualified spending.

- Spending for dedicated low-income programs.
- Spending for low-income multifamily programs in the low-income segment

Department policy has been inconsistent on whether the following counts as qualified spending.

- Spending for verified low-income persons in residential CIP programs for IOUs.

Department policy is not clear on whether the following counts as qualified spending.

- Spending on low-income buildings in multifamily programs included in the residential segment or the commercial segment.

3.3 LI CIP Reporting Requirements

IOUs are required to file CIP Plans (prospective) and Status Reports (retrospective). Reporting for programs in the low-income segment and calculations related to meeting the low-income spending requirements are part of these CIP Plans and Reports. The Minnesota Rules define the IOU CIP reporting requirements and give the Commissioner the discretion to modify those requirements as needed. The reporting requirements include:

- CIP Plans and Status Reports - IOUs are required to file a triennial CIP Plan and an Annual Status Report. For example, in 2016, each IOU filed a triennial CIP Plan for 2017-2019 programs and an Annual Status Report for 2015 CIP accomplishments. [Note: At one time, utilities were required to submit Biennial Plans with the electric utility Plans filed one year and the gas utility Plans filed the next. In another change, the 2013 to 2015 Triennial Planning period for gas utilities was extended to include 2016, and the 2016 to 2018 Triennial Planning period was changed to a 2017 to 2019 Triennial Planning period.]
- Portfolio/Project Reporting - The IOUs are required by the Rules to furnish a general discussion of their overall portfolio along with detailed information on individual projects/programs. The Triennial Plans are expected to show planned investments, including documentation of how the utility will meet the energy savings and program spending requirements. The Annual Status Reports document how actual spending and accomplishments compare to Plans and requirements.
- Segment-Level Reporting - IOUs organize their portfolios into market segments – typically Commercial, Residential, and Low-Income segments, as well as other spending categories. The IOU furnishes detailed information on each program in both their Triennial Plans and their Status Reports. Recently, Department review of Triennial Plans and Status Reports focus on a utility's performance with respect to segment level goals, rather than the individual program goals.
- Low-Income Spending Requirement - The Plans and Status Reports include a calculation of the low-income spending requirement (i.e., the designated spending percentage times the three-year residential GOR) and the ratio of planned or actual spending to that requirement. The Department compliance review includes an assessment of the extent to which the utility has correctly calculated the spending requirement and whether the planned or actual spending meets those requirements.
- Low-Income/Renter Spending - The Rules require that the CIP Plans furnish, for each project, an estimate of the "percentage of use" among low-income participants and renters. And, for each Status Report, they are expected to report the planned and actual low-income and renter participation levels. In previous filings, some IOUs failed to report on low-income participation in projects/programs in segments other than the low-income segment and failed to report on renter participation in all projects/programs. In the most recent set of Plan filings, Department staff requested IOUs to report this information.[5]

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[5]One conceptual issue to consider is that the Rules were promulgated in 2005, prior to the enactment of the low-income spending requirement. The statute in effect at the time the Rules were promulgated required the commissioner to "*ensure that a portion of the money spent on residential conservation improvement programs is devoted to programs that directly address the needs of renters and low-income persons unless an insufficient number of appropriate programs are available”* (§ 216B.241, 1992, Subd. 2). The 2005 Rules related to reporting on participation by low-income customers and renters appear to be directly related to that responsibility. The current statute requires utilities to spend a specified amount on "programs that directly serve the needs of low-

- Reporting Format - The Department has specified that the Triennial Plans and Status Reports have to include certain information. However, it has not specified the use of a consistent format by all utilities. That can make it more challenging for the Department to review Plans and Status Reports, for utilities to compare their Plans and Status Reports to those of other utilities, and for members of the public to compare utility CIP programs.

These Reports generally give the Department the information that they need to assess the performance of the IOUs' LI CIP programs and to assess compliance with the low-income spending requirements.

3.4 Compliance

IOUs file information on their overall portfolio of programs and details on their individual projects/programs. With respect to compliance with statutory and regulatory requirements related to low-income spending, review of the IOU proceedings demonstrates the following:

- Spending Requirement - Department staff review Plans and Status Reports to ensure that spending on low-income programs meets the specified percentage. In most cases, IOUs have spent at least the required amount and often spend more. In the few cases where spending failed to meet requirements, the Commissioner made decisions on how to address the shortfall.
- Program Requirements - Department staff also review low-income programs to ensure that they meet other requirements. Examples of items currently reviewed include verification that proposed programs directly serve the needs of low-income customers, ensuring that income verification procedures are sufficient, and reporting on the participation of low-income persons and low-income renters in programs outside the low-income segment, and renters in the low-income segment.
- Savings Requirements - Department staff approve technical assumptions associated with measures in LI CIP programs and review and monitor cost-benefit ratios of LI CIP programs. However, since Subd. 7 requires the minimum investment in LI CIP programs, Department staff have not required program changes if a program is performing poorly.

A review of IOU proceedings for 2013 and 2014 finds that IOUs are meeting low-income program requirements in almost all cases. Examination of the 2017-2019 Triennial Plans finds that all IOUs propose to meet, and often exceed, the low-income program requirements during that period.

income persons, including renters." This raises a question about whether the low-income and renter reporting requirements in the Rules are still needed. A reasonable person might suggest that, by reporting on the spending in their low-income program segment, a utility is fulfilling this reporting requirement. However, continued reporting on low-income and renter participation in residential segment programs furnishes useful information to the commissioner. And, in the last several years, the commissioner has approved programs in the residential and commercial program segments (i.e., multifamily programs) that offer higher incentives to low-income program participants.

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.

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 Triennial Plan.

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.

Most of the IOU low-income programs use the EAP and/or WAP income guidelines. However, the Department issued guidance on the definition of "low-income" in one Order and in one Guidance document that allowed the use of a different guideline for low-income.

- MERC 4U2 - The Commissioner approved inclusion of MERC's 4U2 program which targets "moderate-income" customers (income in the range from 201% to 300% of poverty) in their low-income segment.
- Multifamily Buildings - The Department issued guidance that defined a low-income building as a multifamily building with 5 or more units in which 66 percent of the units are occupied by low-income households. The guidance stipulates that the low-income program can install building-level energy efficiency measures in low-income buildings, as well as unit-level measures in all units, not just those units verified to be occupied by a low-income household.

While it is not unusual for regulatory agencies to select a guideline that is different from EAP and/or WAP, it is unusual for the regulatory agency to define different guidelines for one or more individual programs.

With respect to these decisions, the flexibility in setting the guideline has resulted in positive outcomes. MERC estimates that more than 50 percent of the 4U2 program participants have income at or below the EAP/WAP standards, but choose to participate in the 4U2 program rather than the Low-Income Weatherization Program. The issuance of the multifamily guidance appears to have resulted in a significant increase in IOU spending on multifamily building programs.

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 has furnished guidance in the following ways.

- EAP/WAP/CIP Application - 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.
- Utility Filings - Staff reviews of utility filings have sometimes requested that utilities improve their income verification procedures. In their review of GMG's 2012 submission of the 2013-2015 Plans, Department staff found that the income verification procedures (i.e., self-certification) were not adequate. After discussion, GMG agreed to enhance verification procedures when the services being delivered to customers were of significant value. In MERC's

4U2 filing, Department staff also recommended enhancement of the income verification procedures.

Where utilities deliver low-income program services through EAP or WAP service providers, the EAP/WAP/CIP application form meets certification requirements. Where other organizations deliver program services, it appears that they are using procedures that are similar to those in the EAP/WAP/CIP application.

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 utilities to collaborate with WAP service providers. As discussed above, the Department developed a joint EAP/WAP/CIP application. And, the Departments has stated in communications with utilities that they recommend that the utilities work with local WAP service providers.

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 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 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.
- Building Owner Contribution Guidance – The Commissioner's decision with respect to Xcel's 2017-2019 Triennial Plan filing ordered Xcel to require owners of buildings with 2-4 units that participate in Xcel's Home Energy Savings Program to pay for 50 percent of the cost of energy efficiency measures unless the building owner is low-income. Note that the Department does not require other IOU programs that serve 2-4 units buildings to follow that guidance, though the CPE Rental Efficiency program does use that approach.
- 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.

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.

The Department also has not reviewed the WAP guidelines on which housing units are eligible to be served to determine which policies should be adopted by utility low-income programs and which should not. For example, they might choose to adopt the guidelines that restrict the service delivery to homes that have been condemned. However, they might not want to adopt the policy that prevents treatment of housing units that have been served by WAP since 1994.

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, many of the IOUs 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.

Our review of the IOU programs finds that those that collaborate with WAP service providers most often rely on WAP/EAP funding to pay for health and safety measures. However, in those programs that use other types of service providers, it appears that program costs include at least some installation of health and safety measures.

4.7 Quality Control Procedures

In "market-rate" residential energy efficiency programs, the participating customer it 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 IOUs find that most delegate responsibility for quality control to their service providers. Follow-up in-depth interviews with those service providers verify that those providers appear to follow the same types of procedures as WAP. However, we did not identify any documentation of the specific procedures that are used, nor did we find evidence that the IOUs are consistently verifying that service providers are meeting quality control requirements.

4.8 Measurement and Verification of Energy Savings

Most jurisdictions specify measurement and verification procedures for both their market rate and low-income programs. Those M&V procedures are designed to ensure that programs are installing measures that are consistent with program guidelines and the installations are consistent with the technical assumptions used for estimating energy savings. M&V procedures can include development of and consistent updates to a Technical Reference Manual, desk reviews of the specifications for installed measures and any energy savings calculations, telephone and/or in-field verification of installed measures, and on-site measurement of the performance of installed measures.

The Department works with a contractor to develop and make updates to the Minnesota Technical Reference Manual. That manual is the default source of energy savings calculations for CIP, including low-income programs. However, language in the TRM explicitly states that the TRM is not the only acceptable procedure for calculating energy savings, nor is it a comprehensive list of eligible energy efficiency measures. The following language is found on page 1 of Version 2.1 of the TRM.

This is consistent with the Department's approach on other matters; it makes recommendations for utility procedures, but it does not require that the utilities follow certain guidelines. However, there are two important issue with the approached used by the Department.

- The Department conducts desk reviews of the specifications and calculations for some installed measures and examines the verification procedures. The Department also requires that IOUs measure the performance of installed measures for large C&I custom projects using prescribed M&V protocols. However, for all other types of projects and programs the Department has not furnished guidance, leaving decisions on implementing M&V procedures to the individual IOUs.
- For most equipment measures, the Minnesota TRM uses a “replace on failure” baseline that assumes that, without the program incentive, the installed equipment would be “standard efficiency” equipment. However, for low-income programs, it may be more appropriate to use “existing conditions” or an “early replacement” procedure for calculating energy savings. Since some of the IOU low-income programs use TRM savings estimates while other used WAP NEAT program output which are based on “existing conditions,” the reported energy savings from different programs are not comparable because they use different baselines.

More guidance from the Department on the appropriate baselines and the necessary M&V procedures for low-income programs would help to reduce uncertainty related to the performance of low-income programs.

4.9 Evaluation of Program Processes and Impacts

Some jurisdictions require that utilities conduct periodic evaluations of low-income program processes and/or impacts. Such evaluations might consider the following types of questions:

- Needs Assessment - What are the energy efficiency needs of low-income households? Is the current program targeting the highest priority energy efficiency needs?
- Energy Saving Potential - What are the opportunities for increasing the energy efficiency of housing units in the low-income market segment? Is the current program targeting the highest value units and/or energy efficiency measures?
- Efficiency and Effectiveness of Program Operations - Are the current program service delivery procedures working effectively toward meeting program goals?
- Energy and Non-energy Program Impacts - What are the energy and non-energy impacts of the program? What are the conditions under which these impacts are maximized? What trade-offs are there between energy and non-energy impacts?

The Department has worked collaboratively with utilities, other program partners, and interested parties to study issues related to low-income program issues, along with other CIP program issues.

However, the Department has not furnished guidance, either in terms of recommendations or requirements related to the evaluation of CIP low-income programs.

4.10 Summary of Findings

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

- Planning and Reporting - The Department has adopted IOU planning and reporting procedures that furnish the Department with in-depth information about how the IOUs are meeting their low-income spending requirements, including information on which households are income-eligible for programs and how the eligibility of households is determined.
- Collaboration with Existing Low-Income Programs – Most of the IOU 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 IOU programs.
- Program Performance – Compared to other jurisdictions, the Department has played only a limited role in specification of quality control procedures, measurement and verification protocols, and program evaluation standards.

This study finds that the Department's policies and procedures have resulted in Minnesota IOUs designing and implementing a diverse set of low-income programs that address the diverse needs of low-income persons, including low-income renters. 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. However, compared to other jurisdictions, the Department policies and procedures on the low-income spending requirement have focused more on obtaining comprehensive information from IOUs about their program plans and accomplishments, and less on developing detailed specifications for the design and implementation of low-income programs. The Department has made recommendations to IOUs regarding collaboration with WAP service providers. The Commissioner has also stipulated that certain programs proposed by the IOUs be designed in a specific way to better serve the needs of low-income customers. But, the Department has generally worked collaboratively with IOUs to identify best practices. This approach appears to have resulted in the IOUs developing an innovative set of low-income programs that address a diverse range of needs and opportunities. However, it has also resulted in some gaps in policies and procedures that leave both IOUs and service providers uncertain about how to address important program issues.

In this section of the report, we make recommendations with respect to ways to address the gaps in important LI CIP policies and procedures. Those recommendations are prioritized in terms of those that we perceive have the greatest impact on the performance of the program, first in terms of the health and safety of low-income program participants, and then with respect to the efficiency and effectiveness of the program. In most cases, we do not recommend a specific policy or procedure, rather a process by which the Department, the IOUs, and other interested parties could work toward the development of policies and procedures that would address the perceived gaps.

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.

5.1.1 Findings on LI CIP Policies and Procedures

As outlined in Section 3 of this report, LI CIP policies and procedures implemented by the Department focus on the following.

- LI CIP Spending Requirements – Developing procedures for computing the amount that utilities should spend on low-income programs.
- Qualified LI Spending – Making policy decisions on whether program spending should be counted toward the low-income spending requirement. Developing guidance on special topics

such as the definition of a low-income multifamily building and the treatment of customers that use delivered fuel main heat.

- Reporting Requirements – Specifying reporting timelines and procedures to ensure that the Department and interested parties have detailed information about the programs proposed by IOUs and about the performance of approved programs.
- Compliance Policies – Conducting timely reviews of IOU Triennial Plans and IOU Annual Status Reports to ensure that the IOUs are meeting the LI CIP spending requirements by investing in programs that serve low-income customers.

In addition to those regulatory activities, the Department also invests staff resources and funding in the development of information and resources that help the IOUs to design and implement effective programs. For example, the Department funded the development of and updates to the Minnesota Technical Reference Manual.

Our review of the LI CIP policies and procedures found that the policies and procedures are usually clear and consistent, and that the IOU program managers have a good understanding of what is required. The areas where there is some lack of clarity include:

- Verified Low-Income Participation in Programs in Other Segments – It is not clear whether an IOU is allowed to count spending on verified low-income customers when the programs are implemented in other segments (i.e., residential segment, business segment).
- WAP Protocols – In some IOU filings, the Commissioner has ordered that a program follow WAP protocols. It is not clear whether that was specific to that program, or whether that policy should be implemented for all low-income programs that deliver comprehensive services. Important components of the WAP protocols include the identification of energy efficiency measures that are eligible for installation and the protocols for assessment and remediation of health and safety issues.
- Definition of “Low-Income Persons” – Among the approved IOUs low-income programs and in the guidance issued by the Department on multifamily buildings, there is considerable flexibility in the definition of a low-income person. Examples include: the MERC 4U2 program serves households with incomes up to 300 percent of poverty, the programs that rely on affordable housing programs to determine eligibility may serve households within incomes up to 80 percent of Area Median Income, and the multifamily guidance can result in energy efficiency measures being installed in rental units that are occupied by households that have income that significantly exceeds the income guidelines.
- Requirement for Landlord Contributions – Among the approved IOU low-income programs there can be significant differences in whether landlords are asked to contribute to the cost of energy efficiency measures and in the amount that they are expected to contribute. The Department is aware of some of these differences and is requiring Xcel to conduct process evaluation research on these programs to develop a better understanding of the implications of decisions related to landlord contributions.

The lack of clarity and/or consistency is important in that it potentially represents a barrier to the IOUs working toward the improvement of existing low-income programs or considering new low-income programs. It they are unsure about whether a program or procedure would be accepted, they might hesitate to invest the time in development of such programs or procedures.

5.1.2 Findings on Gaps in LI CIP Policies and Procedures

As outlined in Section 4 of this report, the Department's regulatory activities have focused more on reporting and compliance than on the development of detailed specifications for program design and implementation. For example, the Department requires that the IOUs furnish detailed information on the specific measures that will be installed in a program, the expected savings from those measures, and the expected performance of those measures in terms of cost-effectiveness. However, the Department generally does not comment on whether a certain measure should be installed or whether the savings estimate for that measure is appropriate.

As outlined in Section 2 of this report, the Department issued guidance on two important issues. The Department issued guidance that clarified policy with respect to serving low-income multifamily buildings. It also issued guidance that allows electric utilities to deliver measures related to heating and water heating to delivered fuel households. Those guidance documents were developed through a collaborative process and have had a positive impact on the design and implementation of innovative low-income programs.

The following is a list of what we consider to be the most important policies and procedures that the Department should work to clarify through a collaborative process with the utilities and other stakeholders.

- 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. It appears that the IOUs programs are following appropriate health and safety guidelines. But, the current Department policies do not specify best practices and do not require IOUs to demonstrate that they are following appropriate guidelines.
- 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. It is not clear whether the IOU programs have adopted similar guidelines.
- Measure Selection Procedures – The Department has recommended that IOUs follow WAP protocols in terms of program design and implementation, but has required this for some, but not all, IOU programs. In our in-depth interviews, IOU program managers reported that they had questions about what measures can be installed in homes under what circumstances. However, unless explicitly specified by the Department for a particular program, that decision is, in fact, left up to the IOU.

- 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 IOUs report that they delegate quality control to the implementation contractors.
- Measurement and Verification / Evaluation – Most jurisdictions have specified systematic M&V and evaluation activities. The Minnesota programs have very limited requirements with respect to M&V and evaluation. Only Xcel has implemented a systematic set of M&V and evaluation procedures, and it is unclear whether the Xcel procedures deliver the type of information needed for effective program performance assessment. [Note: A number of IOUs have included funding for M&V and evaluation activities in their 2017-2019 plans.]

In some cases, we recommend that the Department work to develop a policy to ensure that low-income households are never worse off by participating in a LI CIP program. In other cases, we recommend that the Department work to develop a policy to make it easier for the IOUs to understand best practices for low-income programs.

5.1.3 Priorities for Department Initiatives

We compared the situations where LI CIP policies and procedures are unclear or inconsistent to the areas where we perceive that there are gaps in the set of LI CIP policies and procedures. We find that the areas of gaps have a higher priority than the areas where there is lack of clarity or consistency. For example, we would suggest that one high priority issue is to ensure that all LI CIP programs are following a consistent health and safety assessment protocol. In comparison, determining whether landlords are treated consistently across LI CIP programs is less critical to the overall quality of the LI CIP programs.

- Our recommendations for the priority of addressing the LI CIP policies and procedures are:
- Health and Safety Assessment Protocols – Develop a set of assessment and remediation protocols for all programs.
- Quality Control Procedures – Develop a set of quality control procedures for all programs.
- WAP Protocols – Other than the protocols listed above, determine whether IOU LI CIP programs should follow WAP protocols on eligible buildings, selection of measures, health and safety spending requirements, and incidental repair spending requirements.
- Measurement and Verification / Evaluation – Develop recommended procedures for verifying whether programs are achieving estimated savings and assessing whether programs are operating as efficiently and effectively as possible.
- Consistency Across IOU Programs – Consider whether it is appropriate to treat individuals and measures consistently in all IOU programs. For example, should all IOUs adopt the same requirements for landlord contributions to energy efficiency measures?

- Low-Income Population and Programs – Review the different ways of defining “low-income” persons and consider what housing units should be included in that population. Review the different types of programs that serve low-income customers and consider which should be considered to count toward the low-income spending requirement.

Each of these issues would require a collaborative effort on the part of LI CIP program partners – the Department, IOUs, and implementation contractors – other Department staff (i.e., EAP and WAP units), and other interested parties. Each of the initiatives would require a working group to examine current practices, discuss barriers and opportunities, and develop consensus on the best approach. It might be possible for the Department to issue Guidance documents like the guidance issued for multifamily buildings. However, setting final policies and procedures might require a formal proceeding.

5.2 Health/Safety Assessment and Allowable Measures

5.2.1 Identification of the Issue

Many low-income households have housing units that cannot be safely treated by comprehensive energy efficiency programs until certain health and safety issues are identified and remediated. It is important for ratepayer-funded low-income programs to furnish guidance on how to address those issues in the context of program design and implementation to ensure that low-income households are able to participate in programs, and at the same time protect households from adverse circumstances that can result from the installation of energy efficiency measures without proper preparation.

5.2.2 Discussion

The WAP program has clearly defined health and safety assessment procedures that are based on years of research and testing at the local and national level. The Minnesota WAP program has specific policies with respect to what types of health and safety measures can be installed and what the limits are for spending for health and safety measures using DOE WAP funds and EAP/WX funds. In addition, the Department’s WAP unit recently completed a study of housing units treated by the program that documented the incidence of health and safety issues and the cost of remediation. While other jurisdictions include DOE guidance about WAP procedures for using leveraged funds, the current Minnesota WAP Policy Manual does not furnish any guidance on how or whether ratepayer funds should be used to pay for health and safety assessments or measures.

Many IOUs contract with local WAP service providers and pay for the installation of individual energy efficiency measures as part of a WAP job. In those cases, it appears that the WAP service delivery agency follows the WAP protocol and that WAP and/or EAP/WX funds are used to pay for remediation of health and safety problems. However, in these cases, there have been some questions as to whether equipment-based health and safety issues (e.g., furnaces and water heaters) that are also energy efficiency measures can be paid for – either in part or entirely - by LI CIP funds.

It appears that low-income programs that are implemented by other service providers use similar health and safety assessment and remediation procedures. However, it is not clear whether the standards for those programs are the same as or different from the WAP protocol. Moreover, during in-depth interviews with those non-WAP service providers, it was suggested that inadequate funding for health and safety measures presents a significant barrier to treatment of some of the highest priority households.

5.2.3 Recommendation

Target: We recommend that the Department CIP unit lead a collaborative effort with the Department WAP and EAP units, the IOUs, and low-income service providers to ensure that there is a common framework for conducting health and safety assessments in low-income housing units, identifying what energy efficiency measures can and cannot be installed prior to remediation of health and safety problems, and developing guidelines for what amount of funding from each source can be used for remediation of health and safety problems.

Process: An appropriate starting point for the discussion would be to review the WAP protocols and to compare and contrast any protocols used by non-WAP service providers in the context of LI CIP program delivery. B further discussion should involve a review of which assessment protocols are needed for each type of housing unit and each type of program. The discussion of what health and safety measures should be funded and how much each program should pay for those measures would be enhanced by the in-depth information on the incidence and cost of measures that have been developed by the Department's WAP unit.

Focus: This work would be focused on low-income programs that deliver weatherization services or equipment replacement services to housing units in buildings with 1-4 units. It is not particularly important for programs that deliver electric baseload measures to housing units. A different set of procedures would be appropriate for programs that deliver services to multifamily buildings.

5.3 Quality Assurance for LI CIP Programs

5.3.1 Identification of the Issue

In LI CIP programs that deliver comprehensive energy efficiency services, the low-income household does not have the opportunity to select the contractor that delivers services or the measures that are installed. For that reason, funders of low-income programs usually take responsibility for specifying and verifying quality control procedures.

5.3.2 Discussion

The WAP program has clearly defined quality control procedures. In addition to specified procedures for each service delivery agency, the Department conducts monitoring activities.

The IOUs that contract with WAP service providers to deliver LI CIP services generally report that they expect the service providers to conduct quality control and they note that the Department monitors the performance of those service providers. However, it does not appear that they formalize those expectations in contracts or by getting monitoring reports from the Department.

The IOUs that contract with non-WAP service providers generally report that they expect the service providers to implement quality control procedures. Again, it does not appear that they formalize those expectations in contracts or through independent monitoring of contractors.

Xcel reports that they have a measurement and verification protocol that serves as a quality control check on the performance of both WAP and non-WAP service providers. No other IOU reports having such procedures.

In some other jurisdictions, regulators require that the utilities hire third-party inspectors and file quality control reports for each service provider. As part of those reports, the utilities sometimes will identify specific quality control issues and will specify remediation procedures.

5.3.3 Recommendation

Target: We recommend that the Department CIP unit lead a collaborative effort with the Department WAP unit, the IOUs, and low-income service providers to ensure that there is a common framework for verifying program quality, reporting on performance for each contractor, and identifying remediation procedures for contractors with quality control problems.

Process: To help build consensus on the appropriate procedures, both the Department's WAP unit and Xcel's measurement and verification contractor could share information on the specific procedures that they use, the rate of quality control failure that they observe, and the effectiveness of any remediation procedures that they have implemented.

Focus: This work should examine the quality control protocols for all types of programs in all types of buildings. While it is expected that the protocols would be different for each type of program and each type of building, there are some common principles that should be applied to all programs and all buildings types.

5.4 Use of Other WAP Protocols / Update of WAP Protocols

5.4.1 Identification of the Issue

The WAP program has clear documentation for protocols that can be applied to IOU low-income programs that are designed to increase the efficiency and effectiveness of the program. One area that needs some in-depth discussion is the use of the WAP protocols regarding measure selection for homes in 1- to 4-unit buildings. Other examples include: identification of buildings not eligible for service; treatment of rental units, landlord contributions, and landlord "buy-downs" of energy efficiency measures; standard work specifications; and, staff certification specifications. The primary question is whether the protocols that have been established by WAP are appropriate for LI CIP programs.

5.4.2 Discussion

The WAP Policy Manual furnishes detailed guidelines for WAP service delivery. The Policy Manual clearly describes how to use WAP and WAP/WX funds either separately or together. However, even though many WAP jobs are co-funded with LI CIP funds, the Policy Manual does not have any guidelines on using LI CIP funds on WAP or EAP/WX jobs. Our in-depth interviews show that, since there are no guidelines, the WAP service providers and the IOU program managers believe that the WAP protocols on measure selection are applicable to LI CIP-funded measures.

DOE allows WAP grantees to develop procedures for use of leveraged funds as long as they are consistent with DOE regulations. One example of a way that the Minnesota WAP program does this is that it allows agencies to exceed the limit on the average cost of health and safety measures using EAP/WX funds. Another example is that the WAP program allows landlords to buy down the cost of certain energy efficiency measures in multifamily buildings. The Minnesota WAP program also could specify procedures that allow utilities to pay for the full cost LI CIP measures in single family homes if the utility perceives that the measure is consistent with their LI CIP objectives, even if the measure does not have a savings-to-investment ratio of 1.0 or more.

Each WAP guideline could be reviewed to assess whether it is appropriate for all LI CIP jobs, appropriate only for LI CIP jobs that are co-funded with WAP, or not an appropriate guideline for a LI CIP low-income program.

5.4.3 Recommendation

Target: We recommend that the Department CIP unit lead a discussion with the Department WAP unit, the IOUs, and low-income service providers to systematically review the series of WAP protocols and consider which should be applied to LI CIP programs and in which circumstances. As part of that activity, the group would make recommendations to the Department WAP unit regarding updates to the WAP protocols for jobs that use LI CIP funds.

Process: To help build consensus on the appropriate procedures, the Department's WAP unit would furnish a detailed explanation for each component of the protocol. In addition, the Department might engage other standards organizations (e.g., the Building Performance Institute – BPI) to inform participants of the ways in which their recommended standards vary by program type.

Focus: This work would be focused on low-income programs that deliver weatherization services or equipment replacement services to housing units in buildings with 1-4 units since that is where the WAP protocols are targeted.

5.5 Measurement and Verification / Evaluation

5.5.1 Identification of the Issue

It is common for regulators to specify measurement and verification (M&V) procedures, as well as the schedule for and content of program process and impact evaluations. The Department has developed a Technical Reference Manual (TRM) that utilities are encouraged to use for estimating energy savings, but the Department does not require IOUs to implement additional M&V procedures for their low-income programs. In their Triennial Plan, Xcel reports that they have M&V protocols for each of their CIP programs, including their low-income segment programs. No other IOUs report that they have M&V procedures for their low-income programs.

5.5.2 Discussion

There are three different tools that regulators use to track the performance of energy efficiency programs.

- TRM – The purpose of the TRM is to furnish real time estimates of the energy savings performance of ratepayer-funded programs. The TRM furnishes standardized equations that all program implementers can use.
- M&V – The purpose of M&V is to assess the extent to which the energy savings projected using the TRM are realized. Levels of M&V include desk review of measure invoices compared to program protocols, field inspection of installed measures, and metering to assess the performance of installed measures.
- Evaluation – The purpose of a process evaluation is to develop a more in-depth understanding of whether a program is operating efficiently. The purpose of an impact evaluation is to assess a program's performance in terms of energy savings and other benefits, and to develop a more

complete understanding of what parts of the program are successful and what parts are falling short of its goals.

The Department has invested resources in the development of the Minnesota TRM and has conducted a series of energy savings potential and best practices studies. However, the Department has not specified any other M&V or evaluation activities.

5.5.3 Recommendation

Target: We recommend that the Department support and participate in a low-income program assessment initiative that is described more completely in the LI CIP Program Assessment Report. The Assessment Report compares the energy savings estimates for LI CIP programs across the different IOUs. It finds that the IOUs are projecting quite different savings values from very similar programs. It also finds that some of the IOUs appear to be predicting savings values for certain programs that are considerably higher than any measured program result from similar programs in other jurisdictions.

Process: The proposed starting point for the work group is to review the statistics and findings from the IOU Program Assessment Report. That report clearly identifies where similar programs are projecting different outcomes and suggests some ways in which those differences could be resolved. The next step in the process would be to review Xcel's M&V procedures to assess whether it specifies procedures that could be replicated by other IOUs to develop better estimates of program realization rates. The final step in the process would be to consider whether there would be efficiencies in conducting joint program impact studies for certain programs since each of them deliver similar measures to similar kinds of housing units.

Focus: The first round of work for this group would be focused on low-income programs that deliver weatherization services or equipment replacement services to housing units in buildings with 1 to 4 units. About 75 percent of all resources are devoted to those programs and it would therefore make sense to measure the energy and non-energy impacts of those programs. In the second round, we recommend that each of the specialty programs implemented by individual utilities be examined in order to assess whether they represent good opportunities for other IOUs.

5.6 Consistency across IOU Programs

5.6.1 Identification of the Issue

A detailed review of individual programs completed for the LI CIP Program Assessment Report found that there is some inconsistency in the program incentives when the same energy efficiency measure is installed through different programs. In one program, the IOU might pay for the entire cost of the measure while in another, the IOU might only pay for the incremental cost of a high efficiency measure when compared to a standard efficiency measure. These differences are found both within an IOU's low-income portfolio and between the low-income programs implemented by different IOUs.

5.6.2 Discussion

The CIP statute gives responsibility for program design to the utilities with the idea that each utility can develop a portfolio of programs that best meets the needs of their customers and helps to fulfill the utility's goals in the most cost-effective way. The result is that each IOU has developed its own unique set of programs. If the approach used by one IOU differs from the approach used by another, the Department generally does not comment on those differences.

The LI CIP programs represent a special case. First, the Department does not require that the programs in the low-income segment be cost-effective. Second, the statute allows IOUs to exclude the costs and benefits of low-income segment programs from their calculation of net benefits for utility financial incentives. As such, the Department might decide that consistent treatment of market actors across the IOU low-income programs is an important policy objective, since doing so would not put the IOU at financial risk for fulfilling its responsibilities.

Examples of important actors in the low-income housing market segment include owners of rental units and affordable housing organizations. It is important to note that such market actors often operate in multiple utility service territories and that it would probably enhance their level of engagement with programs if they were able to participate in the same types of programs with the same financial incentives in all IOU service territories.

5.6.3 Recommendation

Target: We recommend that the Department first review these findings in the context of broader policy goals. If the Department agrees that there are reasons to focus on specific market actors, it should outline the specific policy goals for the IOUs and engage them in discussion about alignment of program incentives with the goal of reducing barriers to participation and increasing program participation rates for targeted groups.

Process: The work group would review the findings from this report and from the LI CIP Program Assessment Report to understand the different ways in which the targeted market actor is treated in different programs. The IOUs would bring to the table additional details on the barriers to participation among those market actors, along with the outcomes of any initiatives that they have undertaken to reduce those barriers. The group would work to develop program models that could be implemented by the individual IOUs. The Department would issue guidance related to that program model.

Focus: This report has identified treatment of landlord contributions as one area where IOU programs are not consistent across the set of IOUs. The LI CIP Program Assessment Report also identifies some other types of programs that are offered by some IOUs but not by others. We recommend focusing on the small rental market (buildings with 1-4 housing units) first, since that is usually the market that has the lowest participation rate and the greatest potential for increasing energy savings.

5.7 Low-Income Population and Programs

5.7.1 Identification of the Issue

This analysis has shown that there are significant challenges in defining who are "low-income persons" and how the IOU programs might best serve them. Examples include:

- Income Guidelines – Each IOU program has its own definition of "low income." While many are consistent with the WAP or EAP definition, there are many variations that have been proposed by IOUs and approved by the Commissioner.
- Multifamily Building Guidance - The Department issued guidance that allows LI CIP funds to be used on housing units in "low-income buildings" that are not verified to be occupied by low-income persons.
- Residential Segment Programs - Some IOUs have been able to document that low-income persons participate in residential segment programs.
- Business Segment Programs – Since IOUs often classify multifamily buildings as "business" accounts, some new multifamily programs that serve low-income buildings are in the business segment. The IOUs have different interpretations of whether these expenditures should be counted toward LI CIP requirements.

These developments represent important innovations in the way that low-income households are served by IOU programs. However, it is difficult to align the statutory language on low-income programs with the regulation of the different programs that serve low-income households.

5.7.2 Discussion

One approach would be for the Department to address each of these questions separately. We perceive that these questions are linked in that they each represent a circumstance that may not have been anticipated when the original statutory language was developed, and that they should be treated in a comprehensive way.

At the time that the statute was written, there were relatively few programs in the country that were delivering energy efficiency services to low-income multifamily buildings. Similarly, there was a perception that low-income households would not participate in residential segment programs. The IOUs have undertaken initiatives to meet the LI CIP spending requirements and developed new programs to meet their energy savings goals. Those innovations have changed the way that programs can serve low-income persons.

It is appropriate for the Department to use the information developed in this report and in the LI CIP Program Assessment Report to lead a discussion of how the Department policies with respect to low-income programs should change, and what types of modifications to the statute might be appropriate to support those policy changes.

5.7.3 Recommendation

Target: We recommend that the Department start with the findings from the LI CIP Program Assessment Report to understand what low-income market segments are served by the current set of publicly-funded and ratepayer-funded energy efficiency programs. By comparing the differences in how the publicly-funded and ratepayer-funded programs serve low-income market segments, we believe that it will help to demonstrate why the ratepayer-funded programs need to define the low-income population in a different way from the publicly-funded programs. But, at the same time, this analysis might help to document the need for statutory language that better addresses the needs of the different market segments and supports the broader policy goals of ensuring that all market segments are treated fairly by the LI CIP programs.

Process: The starting point for the development of a draft policy related to revisions in the statutory framework for LI CIP would be internal to the Department. The CIP, WAP, and EAP units would review the performance of their programs in terms of addressing different low-income market segments and would consider the public policy implications of those findings. Once the Department work group has developed policy options, they should open the discussion to the full range of stakeholders for consideration of those and other proposed options.

Focus: This recommendation is fundamentally different in that it suggests that the Department would develop information that would be used by the legislature to amend the statute, rather than the Department using this information to develop new policies and procedures. In addition, the discussion also might lead to changes in other programs such as EAP or WAP to better align the distribution of both public funds and ratepayer funds with the distribution of the population by low-income market segment. While some of these issues could be improved through changes to policy and procedures, it might be more effective to approach these issues using this more comprehensive strategy.

5.8 Summary of Recommendations

This study furnishes information on some ways that the LI CIP policies and procedures could be improved to make the IOU responsibilities clearer and more consistent. It also identifies gaps in the current set of policies and procedures that should be addressed to ensure that the programs better serve low-income households. The LI CIP Program Assessment study conducted an in-depth analysis of the IOU programs that furnished additional information on the need for updates to the LI CIP policies and procedures.

We recommend that the highest priority for the Department is to work toward the development of LI CIP policies and procedures that are focused on program integrity issues. 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.
- Set standards for IOU M&V activities and evaluations. Develop recommendations for programs for which joint evaluations should be conducted.

These recommended activities are listed in order of priority. Some of these recommended initiatives, particularly the health and safety assessment protocols and the quality control procedures, might be relatively straight forward to complete since the study found that all programs have health and safety assessment protocols and quality control procedures, but that those protocols and procedures need to be reviewed for consistency and be better documented.

The other two recommendations relate to broader policy initiatives with respect to the LI CIP programs. The first recommendation is that the Department consider whether it is appropriate to ensure that low-income market actors are treated consistently across the different IOU programs. The second recommendation and longer-term suggestion is that the Department review the new information developed from these studies to consider whether it is time to update the statute to set additional goals for the program. For example, one goal might be to better address the needs of the low-income market by ensuring that the set of IOU programs address all parts of the low-income market.

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 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. 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 regulates rates and practices; many municipal electric distribution utilities are members of municipal power agencies which provide generation and transmission services to member utilities.[6]

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.[7]

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.

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

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

Table 3 displays the IOUs providing electric and gas services to customers in Minnesota.

Table 3 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)[8]	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 4 provides the number of municipal (electric or gas) utilities and cooperative electric associations providing electric or gas services to customers in Minnesota.

Table 4. MN Community-Owned Utilities

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

Table 5 shows a breakdown of utilities by generation and transmission (G&T) power cooperative, municipal power agency, independent power cooperative, and independent municipal utility.

Table 5. MN Community-Owned Utilities

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

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

Organization	Electric Members	Gas Members
Municipal Power Agencies Total	**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[9]	**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 6 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.

Table 6. 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[10]	4

[9] 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.

[10] 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.

COU Reporting in ESP	Number of Reporting Organizations
Great River Energy[6, 11]	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[12]	**182**

[11] 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.

[12] 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 - 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 word 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, measurable 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 determining program eligibility. As utilities and CIP program administrators encounter nuances on this 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.

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.

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.

Use Restriction:

Guidance: Some affordable housing programs require, as a condition of receiving funding, the property owner cite 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.

2 - 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