

EVALUATION REPORT
ON THE
BOARD OF ELECTRICITY

PROGRAM EVALUATION DIVISION
OFFICE OF THE LEGISLATIVE AUDITOR
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PREFACE

On June 28, 1979, the Legislative Audit Commission directed the Program Evaluation Division to evaluate the Minnesota Board of Electricity's inspection and licensing programs. Program Evaluation Division staff conducted the research for this evaluation from July, 1979 through September, 1979. This report presents the staff's conclusions and recommendations. It is being submitted to the Legislative Audit Commission for review.

In some instances the conclusions stated in this report are critical of the performance of the Board of Electricity and its staff. We hope that the criticisms will be viewed as constructive and will help facilitate further consideration of the issues that are raised. Moreover, we wish to note that the Board of Electricity and its staff provided valuable assistance and cooperated fully with the Program Evaluation Division staff.

A draft of this report has been reviewed by the Board of Electricity and its staff. The draft was sent to the board on December 14, 1979. The board returned its comments on January 2, 1980. Program Evaluation staff met with the board and its staff on January 8, 1980 to discuss the report and the board's response. A copy of the board's comments is available from the Board of Electricity or the Program Evaluation Division.

The evaluation was conducted by John Yunker (Project Manager), Kathryn Buxton, and Jo Vos. Mr. Yunker is the author of this report.

James Nobles
Deputy Legislative Auditor
for Program Evaluation

January 25, 1980

EXECUTIVE SUMMARY

This report evaluates the Board of Electricity's inspection and licensing activities. Three general concerns form the basis for this evaluation:

1. Cost Effectiveness: Are the board's inspection and licensing programs cost effective compared to alternative ways of administering them?
2. Managerial and Program Effectiveness: Do the board's programs meet their objectives?
3. Compliance: Do the board and its management comply with the state laws governing their activities?

Our general conclusions in each of these areas are summarized below. Specific findings and recommendations made in the report are also listed and major findings are briefly summarized.

COST EFFECTIVENESS

We find that the board's programs are generally cost effective compared to alternative methods of administering them.

- At the present level of inspection fees, the use of contract inspectors to make electrical inspections is less costly than the use of classified employees, and should be continued. (pp. 19-30)
- Inspection costs might be reduced by using combination inspectors, rather than specialty inspectors. The potential of this alternative to reduce costs depends, however, on how many jurisdictions retain the State Building Code. (pp. 26-30)
- Licensing costs could be reduced by requiring electrician licenses to be renewed every two years rather than annually. (pp. 54-55)

MANAGERIAL AND PROGRAM EFFECTIVENESS

We find that the board's programs generally meet their objectives. There are, however, two areas in which major improvements should be made.

1. The board should improve the protection of consumers by maintaining all records of code violations, making them accessible to the public, and informing interested consumers that an electrical contractor's bonding company must compensate them for financial loss suffered because of the contractor's non-compliance with code requirements. (pp. 14-15)
2. The board's requirement that a master electrician cannot supervise the work of more than one contractor is too restrictive and should be modified. (pp. 45-49)

Legislative action is not required on the first recommendation if the board implements the recommended changes. The second recommendation should be forwarded to the appropriate standing committees and the Legislative Commission to Review Administrative Rules for their consideration.

Additional recommendations concerning management of the inspection and licensing programs are made in this report. We recommend changes in the inspection program which would:

- Improve the supervision of inspectors (pp. 14-15)
- Clarify the methods used to interpret the National Electrical Code (pp. 16-17)
- Clarify the procedures for appealing an inspector's order (pp. 17-18)
- Improve communication regarding the board's inspection fees (p. 18)
- Provide some oversight of municipal electrical inspection programs, as authorized by statute (pp. 18-19)
- Extend the statutory conflict of interest restrictions on municipal electrical inspectors to cover the board's inspectors (p. 19)

These recommendations could be implemented by the board without legislative action. We recommend, however, that the last recommendation be enacted into law.

We also recommend changes in the licensing program which would require the board to:

- Establish explicit criteria which a post high school electrical course must meet in order to be used to satisfy license requirements (pp. 50-51)
- Establish a testing plan for the design of each of its licensing examinations (pp. 51-53)
- Consider revising those license fees which do not reflect the associated licensing costs (p. 55)

COMPLIANCE

We find that the board and its staff have not complied with a number of state laws regulating the activities of either the board in particular or all licensing boards or state agencies in general. Non-compliance is a problem in the following areas:

- The board and its management are not giving inspectors proper written instructions regarding the code standards applicable in various local jurisdictions. For a period of four months in 1978, the board enforced the wrong standards throughout much of the state. (pp. 12-13)
- The board and its employees are, at times, enforcing a policy on electrical equipment approvals which exceeds the board's authority under the National Electrical Code. (pp. 16-17)
- The cover of confidentiality applied to, and eventual destruction of, certain code violation records appears to violate statutes governing official records and data practices. (pp. 13-15)
- The use of guidelines rather than an administrative rule to determine if license applicants meet experience requirements does not comply with the Administrative Procedures Act. (pp. 50-51)
- The board and its management are not complying with the procedure

which all licensing boards must follow in the handling and investigation of complaints against members of the profession it regulates. (pp. 57-59)

- The board's financial activities are not in compliance with state law in two areas. First, the board's policy of renewing the licenses of office staff, field supervisors, and inspectors free of charge violates state law. (pp. 54-55) Second, some board members have received compensation in excess of that permitted by state laws and rules. (pp. 59-60)
- The board is not fully complying with the Minnesota Open Meeting Law. (pp. 60-61)

During the course of our evaluation, we informed the board's staff of the board's non-compliance with statutory requirements in many of these areas. The board and its staff chose to implement a few of our recommendations before the report was available. The board indicates in its response to this report that it will either implement or study our other recommendations on statutory compliance. We recommend that the Legislative Audit Commission review the board's response and determine whether the board is satisfactorily changing its policies and procedures to comply with statutory requirements.

I. INTRODUCTION

A. ORGANIZATION AND ACTIVITIES

The Minnesota State Board of Electricity consists of nine members, each appointed to a four-year term by the governor. State law requires that the board include two electrical contractors with master electrician licenses, two journeyman electricians, two representatives of rural electrical suppliers, one electrical engineer, and two public members.

Many of the board's current powers and duties were revised or added with the passage of the 1967 Minnesota Electrical Act (Laws of 1967, ch. 602). The board currently has two major responsibilities:

1. Inspecting new electrical installations; and
2. Licensing electrical contractors and various classes of electricians.

To carry out its responsibilities, the board has the authority to hire employees. Currently, the board has a regular staff of eighteen. The staff is managed and supervised by an executive secretary and an assistant executive secretary. The other sixteen positions include an electrical examiner, a clerical and accounting unit of nine, and six inspection supervisors.

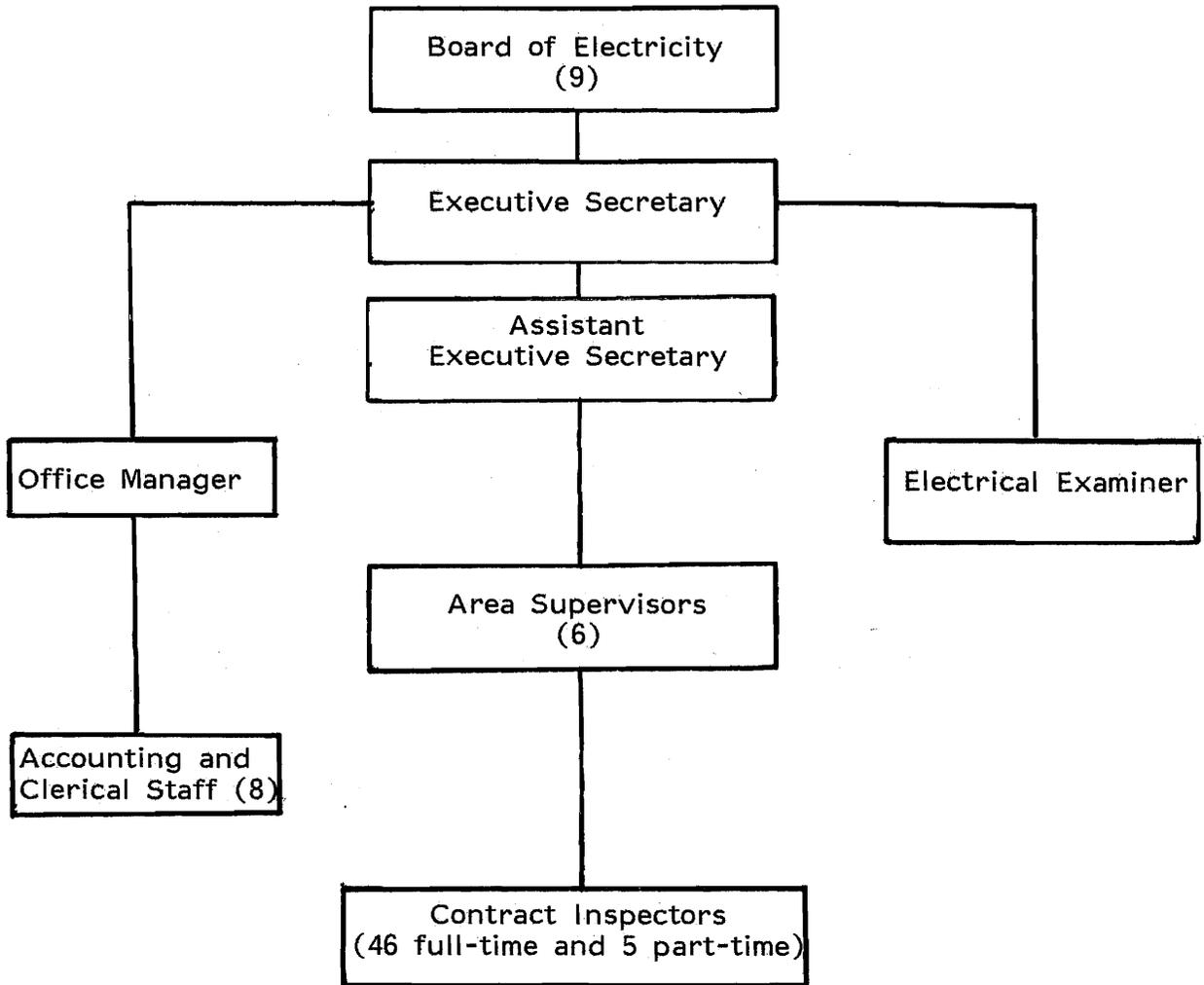
In addition, the board has under contract forty-six full-time and five part-time inspectors who work in the field. Figure 1 details the organization of the board and its staff.

The board's budget appropriation for fiscal year 1980 is \$2,129,200. Approximately 84 percent of this amount is budgeted for inspection activities, 10 percent for licensing, and 6 percent for general support and board expenses. Largely because of its inspection responsibilities, the Board of Electricity has the largest budget of all licensing and examining boards. Its budget for fiscal year 1980 is almost four times larger than that of the next largest budget for a licensing board.

B. EVALUATION ISSUES

This evaluation focuses on the administrative effectiveness and cost effectiveness of the board's inspection and licensing programs. Chapter II examines inspection management and costs. Chapter III evaluates the licensing program. Finally, Chapter IV presents findings on compliance by the board and its staff with statutes governing the activities of licensing boards and state agencies in general.

FIGURE 1
ORGANIZATION AND STAFFING



II. INSPECTIONS

This chapter presents findings and recommendations regarding the inspection activities of the Board of Electricity. First, the inspection activities of the board are reviewed. Second, findings and recommendations on the management of the inspection program are presented. Finally, the cost of inspections and the level of earnings for individual contract inspectors are analyzed.

A. INTRODUCTION

1. JURISDICTION

The Board of Electricity is required by Minn. Stat. § 326.244 (1978) to inspect every new electrical installation in Minnesota. However, cities of the first and second class and other political subdivisions may provide for their own electrical inspections. Currently, 46 municipalities have chosen to do their own inspections. As a result, the board's jurisdiction extends over 90 percent of the state's land area and approximately 56 percent of the state's population. Table 1 lists those cities in which local governments have assumed the responsibility for inspecting new electrical installations.

TABLE 1

MUNICIPALITIES WITH LOCAL INSPECTION PROGRAMS

<u>City</u>	<u>1970 Census Population</u>
Anoka	14,773
Arden Hills	5,149
Austin	26,210
Babbitt	3,076
Bloomington	81,970
Brainerd	11,667
Brooklyn Center	35,173
Brooklyn Park	29,945
Burnsville	19,940
Columbia Heights	23,997
Duluth	100,578
Eagan	19,276
Ely	5,219
Fairmont	10,751
Fergus Falls	12,443
Fridley	29,233
Gem Lake	216
Hopkins	13,428
Hoyt Lakes	3,634
Inver Grove Heights	12,148
Lewiston	1,000
Litchfield	5,262
Little Canada	5,977
Maplewood	25,222
Minneapolis	434,400
Minnetonka	35,776
Moundsview	10,599
New Brighton	19,507
North Oaks	2,002
North St. Paul	11,950
Richfield	47,231
Robbinsdale	16,845
Rochester	59,337
Roseville	34,438
Rushford	1,318
Saint Cloud	42,223
Saint Louis Park	48,883
Saint Paul	309,866
Sartell	2,665
Shakopee	7,438
Shoreview	10,978
Silver Bay	3,504
South Saint Paul	25,016
West Saint Paul	18,802
White Bear Lake	23,313
Winona	<u>26,438</u>
Total Population	1,688,816

2. ELECTRICAL STANDARDS

The board is required by Minn. Stat. § 16.86, subd. 5 (1978) to enforce the electrical standards promulgated by the Department of Administration (DOA) through the State Building Code (SBC). The SBC is not, however, in effect throughout the state. Some counties have rescinded the SBC, as permitted by 1979 legislation. In those counties, the Board of Electricity is still required by law to insure that electrical installations are in compliance with the most recent edition of the National Electrical Code (NEC). A detailed explanation of the laws relating to these standards is provided in Section B of this chapter.

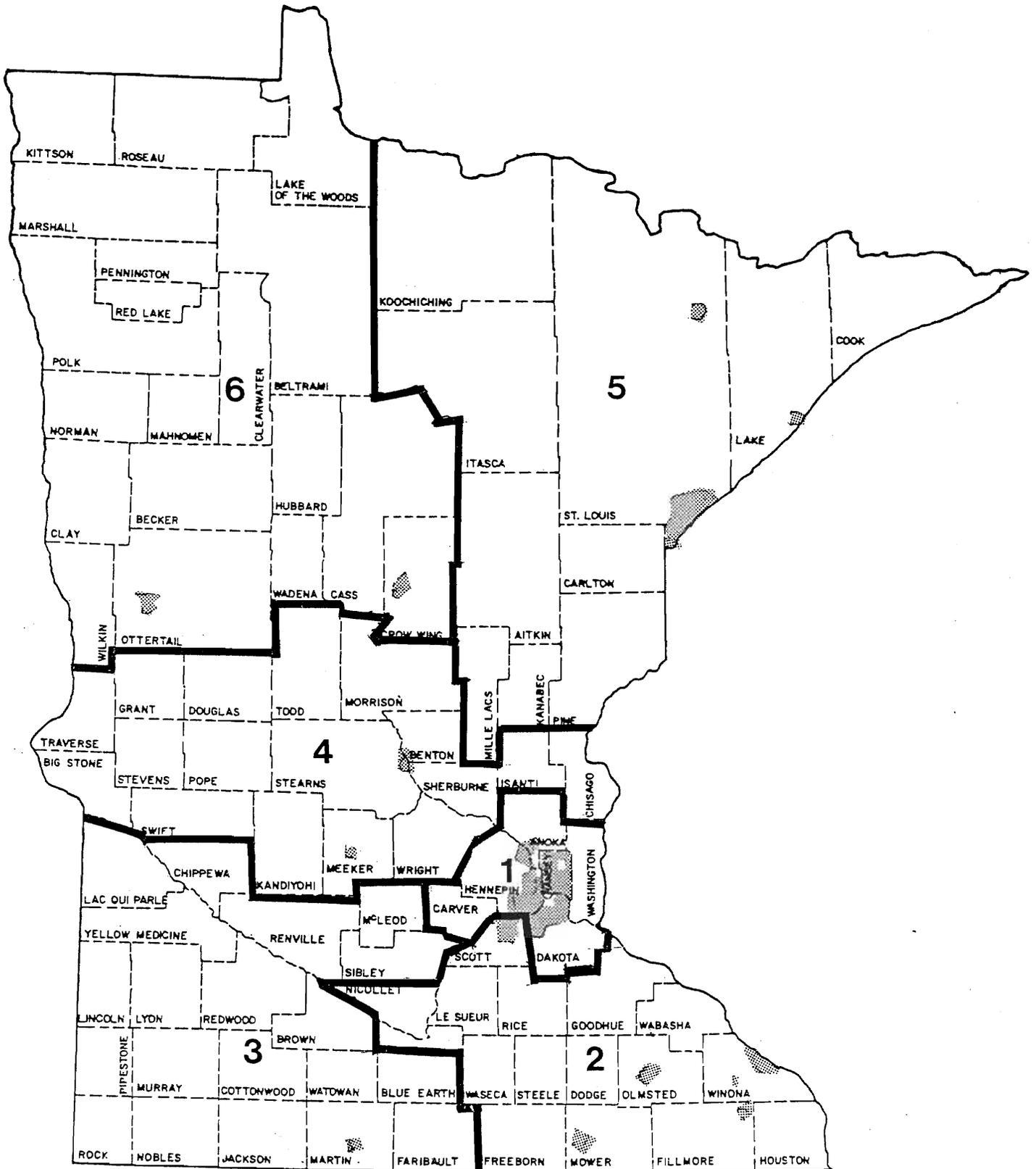
3. STAFFING

The board's inspection responsibilities are carried out by inspectors who are under contract to the board. Although the number of inspectors varies, the board generally has 50 to 55 inspectors stationed in assigned areas throughout the state. Inspectors' areas are grouped into six districts. A field supervisor is assigned to each district. Figure 2 outlines each of the six supervisory districts. The supervisor's responsibilities include reviewing the inspectors' work, assisting them in code interpretations on complex installations, and training new inspectors. Clerical and accounting staff at the board's office in St. Paul process inspection fees and requests for inspections and provide general support functions.

The inspection program is managed by the board's assistant executive secretary. The executive secretary provides for overall agency administration, including the inspection program. The board is ultimately responsible for interpreting code requirements and deciding cases in which an inspector's order is appealed.

FIGURE 2

BOARD OF ELECTRICITY INSPECTION DISTRICTS



Shaded areas are inspected by municipalities.

4. TYPES OF INSPECTIONS

There are two main types of inspections made on an electrical installation: (1) rough-in inspections and (2) a final inspection.¹ Rough-in inspections are completed before wiring is concealed by walls or other visual obstructions. Many code violations can only be discovered at this stage while they can be viewed by the inspector. The number of rough-in inspections made generally ranges from one to three on residential construction but may exceed ten on large commercial or industrial construction. A final inspection is made when all construction is completed. Only one final inspection is necessary unless code violations still exist at the time of the final inspection.

5. ENFORCEMENT PROCEDURES

If code violations are found during an inspection, the board and its staff are required to follow the enforcement procedures set forth in Minn. Stat. § 326.244 (1978) and in the board's rules (4 MCAR § 11.011-11.015). Code violations are reported to the installer of the wiring through three written methods:

1. A rough-in report;
2. A correction order; and
3. A disconnect or condemnation order.

According to the executive secretary and assistant executive secretary, most violations are discovered at the rough-in stage. In fact, they estimate that 98 percent of all violations discovered are recorded in rough-in

¹In addition, an inspection of the temporary service installed for construction work may be required on some installations.

reports. The rough-in reports notify the installer, usually an electrical contractor, of these violations. The installer then has time to correct the violations prior to final inspection.

Correction orders are issued if a violation is still uncorrected at the time of final inspection and only, according to the board's internal "Rules and Procedures" for inspectors, after the inspector has tried "all methods at his disposal to get the corrections made." A correction order generally repeats the list of violations recorded on the rough-in report. Few correction orders are issued by the board's inspectors. According to board records, more than half of the inspectors did not issue a correction order in fiscal year 1979.

A correction order specifies a date not less than 10 nor more than 17 days from the order date when another inspection will be made. If the installation is still uncorrected at the time of that inspection, the inspector, with the approval of his supervisor, may issue a disconnect or condemnation order. If an electrical contractor installed the faulty wiring, the board first notifies the contractor's statutory bonding company. Generally, a contractor complies soon after the bonding company is involved, unless the contractor is appealing the correction order. If a homeowner has installed the wiring and is neither appealing nor obeying the correction order, the board issues a disconnect order. Over the last 12 years, the board has issued 10 disconnect orders.

If an inspector finds an installation which would seriously and immediately endanger human life and property if it were energized, the inspector, with approval of his superior, can order immediate disconnection or condemnation. In that case, the other procedures involving rough-in reports and correction orders are unnecessary.

B. MANAGEMENT AND ADMINISTRATION

In our review, we examined the adequacy of inspection program management and administration in the following areas:

1. Communication and enforcement of the proper code standards;
2. Use of the proper enforcement procedures;
3. Communication of and rationale for the board's interpretations of code standards;
4. Communication of and compliance with the required appeal procedures;
5. Communication of the board's inspection fee schedule to the public;
6. Oversight of municipal inspection programs; and
7. Conflict of interest for state inspectors.

Findings and recommendations in each of these areas are presented and discussed below.

1. CODE STANDARDS

a. Introduction

The Board of Electricity is responsible, through its employees, for enforcing the electrical standards in the State Building Code (SBC). According to Minn. Stat. § 16.86, subd. 4 (1978), the commissioner of the Department of Administration (DOA) is solely responsible for promulgating and amending the SBC. Agencies such as the Board of Electricity, with respect to electrical standards, and the Department of Health, with respect to plumbing standards, may propose to amend the SBC. The commissioner of administration, however, holds all hearings and makes all determinations regarding amendments to the SBC. Enforcing agencies such as the board are required

by Minn. Stat. § 16.86, subd. 5 (1978) to enforce the SBC "under the direction and supervision of the commissioner."

Prior to January 1, 1979, the SBC standards were mandatory only in those jurisdictions which had adopted a building code. In jurisdictions without a code, the board was required by Minn. Stat. § 326.243 (1978) to enforce "accepted standards of construction for safety to life and property." The most recent nationally approved edition of the National Electrical Code (NEC) was used to define "accepted standards" and was considered prima facie evidence of compliance. The electrical standards in the SBC are generally the same as those in the NEC but include some additions and amendments.

On January 1, 1979, the SBC became mandatory throughout the state. However, a law passed by the 1979 legislature (Minn. Laws 1979, ch. 287 § 2) permits certain local jurisdictions to opt out of the SBC. Counties outside the metropolitan area may rescind by negative referenda all requirements of the SBC except the building requirements for handicapped people.² Since the passage of the new law, over 30 counties have rescinded the SBC, and others have scheduled future referenda. Where the SBC has been rescinded, the NEC is presumed to be in effect.³

The following issues provide the criteria for our performance evaluation of code enforcement:

- Has the board directed its inspectors and supervisors to enforce the proper standards applicable in various parts of the state?

²The SBC cannot be rescinded in jurisdictions that adopted the SBC prior to January 1, 1977.

³Although the board and the Department of Administration believe that the NEC is effective where the SBC has been rescinded, some local officials may challenge that interpretation of the law.

- Has management communicated these standards to electrical contractors and the interested public?
- Have the board's inspectors uniformly enforced these standards and imposed no additional restrictions on the electrical industry?

b. Conclusions (●) and Findings (-)

Our conclusions and findings with respect to these issues are:

- The board and its management have given inspectors insufficient and at times improper directives on what code requirements should be enforced in certain areas of the state.
 - Beginning July 1, 1978, the board and its staff enforced the 1978 NEC throughout the state. However, the 1975 NEC was still in effect on this date for the SBC. It was not until October 28, 1978 that the Department of Administration's Building Code Division (BCD) amended the SBC through the rules process and substituted the 1978 NEC for the 1975 NEC. The board and its staff should not have enforced the 1978 NEC until October 28, 1978 in those jurisdictions in which the SBC was effective.
 - Before the SBC became effective statewide on January 1, 1979, the board's management did not supply its inspectors and supervisors with clear written instructions on which standards--the NEC or the SBC--were to be enforced in the various political subdivisions in Minnesota.
 - Since passage of Chapter 287 by the 1979 Legislature, management has not provided written instructions on (1) what areas have repealed the SBC and (2) what standards apply in those areas which have repealed the SBC.
- Written directions to the board by the commissioner of administration might have prevented such problems.
 - The commissioner of administration, through the Building Code Division, has an obligation, pursuant to Minn. Stat. § 16.86, subd. 5 (1978), to supervise and direct the board's enforcement activities.
 - Although officials in the BCD were aware of the board's plans to implement the 1978 NEC statewide beginning July 1, 1978, the board was not advised in writing that its plans were not in compliance with state law.
 - BCD had not provided the board with sufficient written information, on a continuing basis, regarding the areas in which the SBC is effective.

- Management does inform contractors and the public of code changes but could better identify where and when changes in the NEC and SBC are applicable.
 - Contractors and the public were improperly informed that the 1978 NEC was effective statewide beginning on July 1, 1978.
 - Although the 1978 NEC is sold at the board's office, staff does not inform purchasers that the BCD amended several sections of the NEC when BCD adopted it for inclusion in the SBC.
- Management's record-keeping procedures prevent us from determining if inspectors enforce code standards fairly and uniformly.
 - A rough-in report is seen only by the installer of wiring and the inspector who issues it. The report is destroyed following the final inspection.
 - Since rough-in reports comprise approximately 98 percent of the inspectors' orders, we cannot express an opinion on whether enforcement is uniform and fair. (The rough-in report is dealt with in greater detail in the next section on enforcement procedures.)

c. Recommendations

We recommend that:

- The board's management should keep its inspectors and supervisors regularly informed in writing of the proper electrical standards to enforce in the various municipalities and counties throughout the state.
- Management should seek direction from the Building Code Division of DOA regarding the areas in which the SBC is effective.
- A copy of the SBC amendments to the NEC should be available at cost to purchasers of the NEC.

2. ENFORCEMENT PROCEDURES

a. Conclusions (●) and Findings (-)

- The management of the board has employed record destruction and privacy procedures which may violate state law.
 - The destruction of rough-in reports appears to violate Minn. Stat. § 15.17, subd. 1 and 2 (1978), which require that the chief administrative officer of each agency maintain all records necessary to "a full and accurate knowledge" of the agency's

"official activities".⁴ Rough-in reports constitute the only record of code violations for many inspection jobs.⁵

- Management's policy that rough-in reports are confidential violates Minn. Stat. § 15.17, subd. 4 (1978), which requires official⁶ records to be accessible for convenient use by the public.
- Management's record destruction and privacy procedures do not protect the interests of consumers.
 - Current procedures prevent homeowners and others who have hired electrical contractors from obtaining access to the rough-in reports which document most code violations. A person wishing to withhold partial payment from a contractor or wishing to take legal action to have a bonding company correct the code violations at its expense is (1) denied access to code violation records and (2) not informed by board staff that a contractor's bonding company is obligated pursuant to Minn. Stat. § 326.242, subd. 6 (1978) to compensate the customer for financial loss suffered because of the contractor's non-compliance with code or other legal requirements. For example, a customer is not obligated to pay for the labor costs involved in removing and replacing faulty wiring. However, under current procedures, a customer does not know what code violations were made because he is denied access to rough-in reports.
 - Persons interested in hiring a contractor are denied access to rough-in reports and consequently to most information regarding the job performance of electrical contractors. The board currently takes no steps to (1) compile such information on job performance for consumers or (2) use it in revoking or refusing to renew a contractor's license.
- The board's management and supervisory personnel could improve the effectiveness and efficiency with which they review the performance of inspectors.

⁴If the executive secretary and the board wish to destroy public records, they must obtain approval from the Records Disposition Panel, in accordance with Minn. Stat. § 138.17, subd. 1 (1978).

⁵In addition, Minn. Stat. § 504.23 (1978) requires that code violation records on each property be maintained and at least be available to persons who have legal or beneficial interest in the property. This section applies in those areas of the state in which the board is enforcing a "building code", such as the SBC.

⁶Effective January 1, 1980, access to government data is governed by Minn. Laws 1979, ch. 328 § 7 (The "Minnesota Government Data Practices Act"). Under this act, the board would continue to be required to maintain public records of code violations including those contained in rough-in reports.

- Currently, supervisors do not regularly review rough-in reports to insure that inspectors are enforcing the proper code standards. Supervisors perform more of a consulting role to inspectors than a supervisory role.
- Furthermore, supervisors do not do routine spot checks of rough-in reports which might aid in identifying inspectors who need further training on code standards or enforcement procedures.
- Lacking supervisory reports on inspectors, the board and its management also lack information that could be helpful in deciding whether to renew inspector contracts.

b. Recommendations

- At a minimum, the executive secretary should maintain records of rough-in reports and make them accessible to the public, as appears to be required by law.
- The board's staff should assist homeowners and others who have hired contractors by supplying them with a copy of each rough-in report upon request and informing complainants of the bonding company's legal obligation to compensate them for financial loss resulting from a contractor's non-compliance with code or other legal requirements.
- The board should begin to compile code violation records by contractor so that they are accessible for convenient use by the public.
- Supervisors should (1) regularly review each inspector's rough-in reports to see that they are written according to established procedures and enforce the proper code standards and (2) report their findings in writing to the board and management. Needs for additional inspector training should be identified.

3. BOARD INTERPRETATIONS

a. Introduction

Both the NEC and the SBC grant the Board of Electricity the authority to (1) make interpretations of code standards, and (2) approve electrical equipment and materials for use within the board's jurisdictional area. The following issues form the basis for our evaluation of the board's performance:

1. Does the board have uniform policies and procedures for interpreting code standards?
2. Do the board and its management adequately communicate these policies and procedures to electrical contractors and the interested public?
3. Is the board's policy on equipment approvals consistent with the NEC?

b. Conclusions (●) and Findings (-)

- Both the board and the National Fire Protection Association (NFPA), which publishes the NEC, have procedures for deciding on code interpretations.
 - The NFPA has established formal procedures for determining how the NEC should be interpreted by enforcing agencies such as the board. The NFPA also issues The National Electrical Code Handbook which provides some guidance as to the intent of those who established the NEC.
 - The board also permits installers to appeal code interpretations made by inspectors to the board. The board uses many different sources, including the NEC handbook, in determining issues of code interpretation.
- The board and its management could improve their communication of code interpretation policies and procedures to electrical contractors and the interested public.
 - The board and its staff have not adequately informed contractors and the public that they intend to use the NEC handbook and other sources to interpret the NEC.
 - In one case, the board enforced an interpretation which, although contained in the NEC handbook, is more restrictive than a literal interpretation of the NEC. Management says it will recommend to the NFPA that the NEC be amended in this section so that the text of the NEC contains the requirements which now appear only in the handbook.
 - Because NFPA inadvertently omitted part D of the Appendix, containing its formal interpretation procedures, from the 1978 edition of the NEC, some contractors may be unaware that these national procedures exist.
- The board and its employees have, at times, enforced a policy on equipment approvals which exceeds the board's authority under the NEC.
 - Both the NEC and SBC permit the board to approve equipment if it is listed for use by a national testing laboratory. How-

ever, the NEC and SBC do not require that equipment be nationally listed in order to be used. Equipment without a listing can be rejected only if it fails to meet the criteria set forth in section 110-3 (a) of the NEC.

- The board and its employees, however, have rejected equipment solely because it was not nationally listed.
- Because this board policy is more restrictive than the NEC and SBC, the board cannot legally enforce it unless it is promulgated as a state rule. To the extent that the policy affects jurisdictions using the SBC, the commissioner of DOA must conduct the rule hearings and promulgate the rule in accordance with Minn. Stat. § 16.86, subd. 4 (1978).

c. Recommendations

- The board and its management should inform the public of its intent to use the NEC handbook and other sources to interpret the NEC.
- The board should identify those sections of the NEC for which it intends to enforce an interpretation which goes beyond the literal text of the NEC. Management should inform contractors and the public about such interpretations.
- The board should amend its current position on equipment approvals so that it is consistent with the NEC and SBC. If the board feels that its current equipment approval policy is necessary and reasonable, the board should propose to the commissioner of DOA that rule hearings be conducted.

4. APPEAL PROCEDURES

a. Conclusions (●) and Findings (-)

- The board and its management need to clarify (1) when an "appeal" to the board of an inspector's order is permitted and (2) when an appeal becomes a contested case and should be referred by the board to the Office of Hearing Examiners.
 - Although the board currently conducts "appeals" of correction orders, statutory and rule language is unclear about whether the board has such authority.
 - The executive secretary has indicated to us that it is not clear to him whether a contested case hearing commences following the board's rejection of an "appeal" of a correction order or the board's rejection of an appeal of a disconnect order.

b. Recommendations

- The executive secretary, with the assistance of the Attorney General's Office, should clarify (1) whether the board can conduct an "appeal" of a correction order and (2) when a contested case must be commenced or may be initiated by the board.
- The board should recommend statutory changes to the legislature or propose rule changes which clarify these questions.

5. INSPECTION FEE SCHEDULE

a. Conclusions (●) and Findings (-)

- The board can improve its communication to contractors and the public of its inspection fee schedule.
 - According to board staff and management, those installing wiring, particularly homeowners, are sometimes confused about how to compute the inspection fees they are required to pay.
 - Management has responded to requests for information about inspection fees by sending an entire set of the board's statutes and rules, only a part of which includes the board's fees.

b. Recommendation

- The board should consider revising its request for inspection form at its next printing so that fees are listed next to each item for which fees are charged. The new form could be supplemented by the text of the board's rules on inspection fees, when more information is requested.

6. OVERSIGHT OF MUNICIPALITIES

a. Conclusions (●) and Findings (-)

- The board is not taking the minimum steps necessary to insure that municipalities performing their own electrical inspections have inspection programs similar to that established by law for the board.
 - The Attorney General has ruled that "the board may determine whether or not a political subdivision's inspection program is similar to that of the act, and, if not, the board has a duty to make an inspection of any new installation" in that political subdivision (Op. Atty. Gen., 188-b, April 23, 1968).

- The board and its staff do not have copies of current inspection ordinances and codes for some of the municipalities as required by Minn. Stat. § 326.244, subd. 4 (1978).

b. Recommendation

- The board should enforce Minn. Stat. § 326.244, subd. 4 (1978) by requiring each municipality with an electrical inspection program to file with the board copies of its current inspection ordinances and codes. The board should review current ordinances to see whether municipalities have inspection programs similar to that prescribed by the Minnesota Electrical Act as amended.

7. CONFLICT OF INTEREST

a. Conclusions (●) and Findings (-)

- There are no state laws or rules which define conflicts of interest for the board's inspectors and regulate the inspectors' activities.
 - State personnel rules on conflicts of interest are applicable to state employees and not to independent contractors such as the board's inspectors.
 - State law prohibits municipal inspectors from engaging in the sale or installation of electrical wiring or equipment and from holding a financial interest in a concern engaged in such business. State inspectors are not covered by this provision.

b. Recommendation

- The legislature should extend the conflict of interest restrictions in Minn. Stat. § 326.244, subd. 4 (1978) to cover the board's inspectors.

C. COSTS

As permitted by law, the Board of Electricity hires all of its inspectors on a contract basis rather than in the classified civil service.⁸ During

⁷ Minn. Stat. § 326.244, subd. 4 (1978).

⁸ Minn. Stat. § 326.241, subd. 2, clause 2 (1978).

our study, each inspector received 85 percent of the inspection fee paid by the electrical contractor or homeowner installing the wiring. Inspection fees must be established by the board in a rule hearing. Fee changes must be approved by the Department of Finance in advance of scheduling a hearing. The last change in inspection fees was made on March 15, 1976.

In 1978, the average gross income for the board's inspectors was \$29,223. The average income for full-time inspectors in the metropolitan area was, however, \$43,796.⁹ The highest paid inspector earned \$55,182 in 1978. In fact, four inspectors earned more than \$45,000, the salary of the highest paid state agency head in 1978.

The high income of some contract inspectors prompted the following evaluation questions:

- Do the board's contract inspectors earn excessive incomes in comparison to the earnings of electricians and electrical inspectors in other jurisdictions?
- Could the costs of inspection be lowered by using civil service rather than contract inspectors?
- Could costs be lowered by using "combination inspectors" who do building and other inspections in addition to electrical inspections, instead of using "specialty inspectors" who do only electrical inspections?

These questions are examined below.

In addition, we examined the present system of financing payments to contract inspectors. Currently, the legislature appropriates funds sufficient to pay inspectors 85 percent of the estimated inspection fees for inspections to be conducted over the fiscal biennium. Because of the difficulty in estimating the demand for inspection services, actual inspection fees exceeded

⁹The metropolitan area in the board's District One includes the following counties: Anoka, Carver, Dakota, Hennepin, Ramsey, and Washington.

the legislative appropriation for fiscal year 1979 by \$185,000. As a result, the board requested and the governor recommended a change in the present financing system during the 1979 legislative session. As a consequence, an analysis of whether the current system needs to be changed is also presented in this section of the report.

1. CONTRACT INSPECTORS' INCOMES

a. Conclusions (●) and Findings (-)

- Although the gross income of many of the board's inspectors exceeds that of electricians and other electrical inspectors in Minnesota, a comparison of incomes should be based on net earnings per hour worked. A fair comparison must consider differences in fringe benefits, working hours, and work related expenses.
 - The board's contract inspectors are paid a fixed percentage of the fee for each inspection completed. They do not receive the fringe benefits such as a pension or health insurance that are received by other inspectors and by some electricians.
 - Contract inspectors work from 45 to 60 hours per week compared to the standard 40 hour work week for other members of the profession. The board's inspectors do not have the paid holidays, vacations, or sick leave which others have. They also do not receive premiums for overtime pay as some electricians do.
 - The board's inspectors use their own vehicles and are not reimbursed for automotive or other expenses incurred during the performance of their duties. The average full-time inspector traveled approximately 33,000 miles and incurred associated expenses of more than \$4,300 during 1978.
- The earnings of the board's contract inspectors are comparable to the salaries and fringe benefits paid to electricians and other electrical inspectors in Minnesota, when gross earnings are adjusted for differences in fringe benefits, expenses, and hours worked.
 - After expenses, the average contract inspector earned an estimated \$10.43 per hour worked during 1978. The salary and fringe benefits earned per hour worked by municipal inspectors ranged from \$9.35 to \$15.40 during 1978. (See Table 2.)
 - Electricians earning the prevailing wage and benefits set by the Department of Labor and Industry received from \$11.98 to \$14.22 in wages and benefits per hour worked. Although the average hourly income of electricians in Minnesota may be less

than the prevailing wage and benefits, the average inspectors for the board also earned less than the prevailing wage.¹⁰

- During 1979, the wages of board inspectors have not kept pace with increases for municipal inspectors. Some municipal inspectors have received wage increases of six to seven percent this year. The board's inspectors have not yet received a fee increase, but the average fee received per inspection has increased 5.25 percent during the first ten months of 1979. Considering increased transportation costs, we estimate that the net hourly earnings of the board's inspectors have increased by approximately two percent during 1979.
- The board's metropolitan area inspectors earn more than board inspectors elsewhere in the state, but their hourly earnings are comparable to those of other metropolitan area inspectors and metropolitan area electricians earning the prevailing wage rate.
 - Board inspectors in District One earned an estimated \$14.12 per hour during 1978, while inspectors in Districts Two through Six earned an estimated \$9.43 per hour. The difference in earnings is attributable to two factors: (1) District One inspectors traveled fewer miles per inspection completed (13.7 miles compared to 20.5 miles) and thus had a lower car expense per inspection than other board inspectors and (2) the average inspection fee paid in District One was higher (\$19.22 compared to \$16.11) in part because metropolitan inspectors do proportionately more commercial and industrial inspections having higher inspection fees.
 - District One inspectors, however, earned less than inspectors in Minneapolis and St. Paul. (See Table 3.)
 - District One inspectors earned less than the prevailing wage of \$14.22 in Carver, Hennepin, and western Anoka County. They earned more than the prevailing wage of \$13.59 paid in Dakota, Ramsey, Washington, and eastern Anoka County.¹¹
 - Furthermore, the \$14.12 per hour figure probably overstates the actual net hourly earnings of the board's metropolitan area inspectors. That figure does not take into account that the board's inspectors: (1) do not receive any overtime premium for hours worked beyond the standard work week, (2) have other unreimbursed business expenses in addition to automobile expenses, and (3) have higher tax rates than municipal inspectors because they earn more gross income. Including any of these factors would reduce the hourly wage of the board's inspectors below that used in this report.

¹⁰ According to Minn. Stat. § 177.42, subd. 6 (1978), the prevailing wage is the wage and benefit package paid to the largest number of electricians in a given area. The figures above are based on the wage determination made by the Department of Labor and Industry on October 15, 1978.

¹¹ The prevailing wages cited include fringe benefits and are based on hours worked.

TABLE 2

INCOME AND FRINGE BENEFITS PER HOUR WORKED
BY ELECTRICAL INSPECTORS DURING 1978

<u>Board of Electricity</u>	<u>Duluth</u>	<u>Minneapolis</u>	<u>Rochester</u>	<u>St. Paul</u>
\$10.43	\$12.89 to \$14.27	\$14.29 to \$15.40	\$9.35	\$14.57

TABLE 3

INCOME AND FRINGE BENEFITS PER HOUR WORKED BY
METROPOLITAN AREA INSPECTORS DURING 1978

<u>Board of Electricity District One Inspectors</u>	<u>Minneapolis Inspectors</u>	<u>St. Paul Inspectors</u>
\$14.12	\$14.29 to \$15.40	\$14.57

b. Discussion

Our findings demonstrate that the board's contract inspectors were not earning excessive wages during 1978 and 1979, when compared to other electrical inspectors and electricians in Minnesota. However, after receiving a draft of our report, the board increased the percentage of the inspection fees paid to inspectors from 85 percent to 98 percent. This action, effective January 1, 1980, will provide an immediate 15.3 percent increase in inspectors' earnings. Whether this increase exceeds the increases received by municipal inspectors and other electricians during 1979 and 1980 depends on the increases which these other groups receive during 1980. Some of these groups are still negotiating increases for 1980.

It is apparent that a number of contract inspectors have very large workloads. Many of the metropolitan area inspectors complete two to three times the number of inspections that municipal inspectors do. While they may work 50 to 70 percent more hours than a municipal inspector, they are not able to allocate as much time to each inspection as other inspectors are able to allocate.

The board has recently hired an additional full-time inspector in the metropolitan area. This addition will help to reduce the workload of two of the eight inspectors in the area. It will not, however, reduce the workload of the two metropolitan area inspectors who usually complete the most inspections in a year. We recommend that the board and its management carefully review the performance of its inspectors with the largest workloads on an annual basis. The board should determine whether those inspectors are able to devote sufficient time to each inspection and, if not, how inspection districts should be changed or how many additional inspectors are needed.

2. ALTERNATIVES TO THE CURRENT INSPECTION SYSTEM

a. Introduction

Two alternatives to the present contract system were investigated: (1) the use of civil service rather than contract employees for electrical inspections, and (2) the use of combination inspectors. The first alternative would continue the use of specialty inspectors, who do only electrical inspections, but would eliminate contract employees and substitute civil service employees. The second alternative could involve the employment of either contract or civil service employees, but would replace specialty inspectors with combination inspectors. The combination inspector is able to perform all the inspections (plumbing, building, mechanical, and electrical) which are required by the State Building Code.

These two alternatives were examined primarily for their potential to reduce the costs of inspection. While we are able to estimate with some confidence the effects of a change to civil service employees on total electrical inspection costs, it is difficult to make estimates for the impact of a combination inspector system. This difficulty exists primarily because data is hard to obtain on the costs of combination inspection programs in other states.

b. Conclusions (●) and Findings (-)

- The use of civil service employees to do electrical inspections would likely increase the costs of inspection.
 - During 1978, the Board of Electricity had a lower cost per inspection than any other municipal civil service inspection department for which comparable data was available.
 - Assuming that civil employees would be as productive as the board's contract employees, it would have been necessary to pay each civil service employee no more than \$6.98 per hour in order to meet the board's 1978 inspection costs. That wage rate is less than: (1) the \$7.82 per hour which was paid to state building inspectors at the entry level, (2) the \$7.59 per hour paid to a state-employed electrician at the mid-point of the 1978 salary range, or (3) the wage rate paid to any muni-

icipal civil service electrical inspector in Minnesota for whom we have salary information. Inspection costs would increase by an estimated 8.7 percent under civil service if inspectors were paid a salary and fringe benefit package comparable on average to their current net hourly earnings as contract employees.

- Assuming that civil service inspectors would have a productivity similar to that of municipal civil service inspectors, the costs of inspection would increase by 30 to 40 percent under a civil service system. Table 4 provides information on the productivity of municipal and state electrical inspectors.
- A contract system is also more efficient than a civil service system because the payments to inspectors will decline during a period of low construction activity. Inspection costs cannot be significantly lowered under a civil service system.
- Eliminating the contract system would also eliminate the board's present flexibility in hiring and firing inspectors.
 - The contract system allows the board to dismiss unproductive employees after 30 days notice.
 - The board is able to fill vacancies in a relatively short time.
- A combination inspection system may increase inspection productivity and reduce inspection costs.
 - Combination inspectors are able to combine specialty inspections at certain points and reduce the number of trips required for an inspection. Table 5 shows how eleven specialty inspections on a one family dwelling could theoretically be reduced to just four inspections by a combination inspector. In practice, combination inspectors report they are able to reduce the actual number of inspections by six or seven.
 - Some building officials report that combination inspectors are often more effective than specialty inspectors in spotting code violations since they look at the entire structure at several points during construction instead of concentrating on a specific area.
 - The combination inspection program allows a single permit to be issued for all phases of construction work, especially residential construction. This eliminates the need to obtain four or five different permits from four or five different locations.
- It is feasible to train combination inspectors to do electrical and other types of inspections, but combination inspectors do require assistance from specialty inspectors on more complex construction work.
 - Some jurisdictions in California, including some rural counties as well as the city of Los Angeles, have combination inspectors. The city of Phoenix, Arizona also employs combination

TABLE 4
ESTIMATED PRODUCTIVITY OF ELECTRICAL
INSPECTORS DURING 1978

	<u>Final Inspections Per Full-Time Inspector</u>	<u>Hours of Inspec- tion Work Per Inspector-Year</u>	<u>Inspections Com- pleted Per Hour</u>
Board of Electricity			
District 1	2,384	2,742	0.87
Districts 2-6	1,606	2,278	0.71
All Districts	1,741	2,359	0.74
Minneapolis	1,792	1,083	0.60
St. Paul	1,707	1,000	0.59
Duluth	1,792	1,053	0.59

TABLE 5
INSPECTIONS REQUIRED FOR A SINGLE FAMILY RESIDENCE

<u>Combination Inspections</u>	<u>Specialty Inspections</u>
1. Soils (if required), footings	Building #1
Electrical service (not always required)	Electrical #1
2. Foundation, roof, framing, bracing, fireblocking	Building #2
Chimneys, vents, other mechanical	Mechanical #1
Rough-in electric	Electrical #2
Rough-in plumbing	Plumbing #1
(additional roughins may be required)	(additional roughins may be required)
3. Drywall/lath (not always required)	Building #3
4. Final electric	Electrical #3
Final plumbing	Plumbing #2
Final mechanical	Mechanical #2
Final building ("Walk through")	Building #4

inspectors. The state of Oregon is now permitting the use of combination inspectors.

- In the areas that have had combination inspection for several years, a combination inspector is required to complete an intensive technical and supervised on-the-job training program before the inspector can do inspections without the personal supervision of an experienced inspector.
- These jurisdictions generally provide assistance to combination inspectors on complex inspections. Either specialty inspectors or supervisors who are specialists are available to assist the combination inspector on complex or problem inspections. Combination inspectors are considered to be sufficiently competent to inspect residential construction without the assistance of a specialty inspector.
- Areas with combination inspection report that they have had no significant problems with, or lawsuits resulting from, the quality of work done by combination inspectors.

c. Discussion

At the current level of inspection fees, it would not be cost effective to use civil service employees, instead of contract employees, to do electrical inspections. We consequently recommend that the contract system be maintained.

We make no recommendation, however, regarding the use of combination inspectors. Cost savings from combination inspection would more likely result if combination inspection was implemented statewide. The implementation would at least have to involve several counties in order to justify the employment of combination inspectors on basic inspections as well as the use of specialty inspectors on more difficult inspections. Because over thirty counties no longer have a building code, the number of required building inspections in Minnesota has declined sharply. Combination inspection has considerably less potential to provide cost savings when building inspections are not required throughout much of the state. Because other counties may also reject the building code in the near future, it is difficult to predict what the future building inspection requirements for the state will be.

Our evaluation findings may, however, be of some use to the legislature. It appears that combination inspection is feasible and may reduce total inspection costs by reducing the number of trips and staff time required for an average inspection. Whether combination inspection is needed will depend on how many counties continue to require building inspections and on any future policy decisions the legislature may make on the building code issue.

3. FINANCING

a. Introduction

Prior to July 1, 1976, the board's activities were financed by receipts deposited in a special dedicated receipt fund. During the next fiscal year ending June 30, 1977, all activities of the board, except payments to inspectors, were financed by appropriations from the general fund. All receipts except inspection fees were deposited in the general fund. Inspection fees to be paid to contract inspectors were deposited in and expended from a special revenue fund.

Beginning July 1, 1977, however, all the board's receipts, including inspection fees, were deposited in the general fund as required by Minn. Laws 1977, ch. 455 § 83. Appropriations for all expenses, including payments to inspectors, were made to the board based on previous levels of inspection and licensing activity. Figure 3 illustrates how the board's operations are currently funded.

Due to unanticipated increases in construction activity and in the average fee collected, the appropriation for the 1978-79 biennium was not sufficient to pay inspectors. The board requested and received from the Legislative Advisory Commission an additional \$50,000 for payments to inspectors in May 1979. The board also received \$135,000 for June 1979 payments

from the 1979 legislature. To eliminate the need to make similar requests in the future, the board has requested that Minn. Stat. § 326.241, subd. 3 (1978) be amended so that the board has an open appropriation to pay for inspection services provided by contract inspectors.

b. Conclusions (●) and Findings (-)

- The current system of financing can sometimes cause additional work for board personnel and minor delays in payments to inspectors.
 - Payments to inspectors were delayed from one to two weeks in June, 1979.
 - A small amount of additional work is required to monitor inspection payments and estimate the amount of supplemental appropriations needed.
 - If, however, the demand for inspection services falls below budget estimates, then supplemental appropriations would not be needed.
- A completely open appropriation for inspection services, as proposed by the board, would eliminate budgetary review of inspectors' earnings and could permit the board to operate with a deficit subsidized by the general fund.
 - The current legislative appropriation places a limit on the percentage increase in payments to inspectors. This limit results from review of the board's fees and the inspectors' earnings during the budgetary process. Limiting the increase in inspectors' earnings is somewhat comparable to making a decision on how much the incomes of state employees should increase over a biennium. A completely open appropriation would eliminate legislative and executive branch review of inspectors' earnings.
 - A completely open appropriation would permit the board to increase inspectors' earnings without holding a public hearing and without regard to whether the board's operations would continue to be self-supporting. This could be done by increasing the percentage of the inspection fee paid to inspectors and thus decreasing the portion of the fee retained by the state to cover the costs of administering the inspection program. Since the board would not be increasing its inspection fees, it would not be required to comply with the provisions of Minn. Stat. § 214.06, subd. 1 (1978), which require that fee changes be approved by the commissioner of finance, be adopted by administrative rule, and be sufficient to insure that total fees collected approximately equal expenditures during the fiscal biennium.

c. Recommendation

It appears that some minor benefits will result if the legislature adopts the open appropriation method for inspection services, as proposed by the Board of Electricity. A completely open appropriation would, however, permit the board to raise inspectors' earnings without increasing inspection fees. The board's operations could then be partially subsidized by the general fund.

We recommend that the legislature defer action on the board's proposal. Any change in the financing system should retain financial controls sufficient to insure that the board's operations will be self-supporting.

III. LICENSING

This chapter presents our findings and recommendations regarding the Board of Electricity's licensing activities. First, we present a general overview of licensing activities. This is followed by our findings and recommendations on the board's licensing policies.

A. INTRODUCTION

1. JURISDICTION

The Board of Electricity currently licenses eleven classes of electricians and two classes of electrical contractors. The board has specific statutory authority to license six classes of electricians and both classes of contractors.¹² These statutory licenses include the "A" master, "B" master, "A" journeyman, "B" journeyman, "A" installer, and "B" installer licenses for electricians, and the "A" and "B" contractor licenses. In addition, the board has four electrician licenses which are not required by statute or rule but which were grandfathered in by the 1967 Minnesota Electrical Act.¹³ They

¹²Minn. Stat. § 326.242 (1978).

¹³See the continuity clause in Minn. Stat. § 326.247 (1978).

include the lineman, limited, master elevator constructor, and journeyman elevator constructor licenses. Finally, the board is permitted to establish by rule classes of special electricians.¹⁴ A special electrician is able to engage in a limited class or classes of electrical work. The board has established one class of special electrician, the maintenance electrician.

During fiscal year 1978, the board issued 10,263 electrician licenses and 1,885 contractor licenses. Table 6 shows that the "A" journeyman and "A" master licenses are the most common classes of electrician licenses. Approximately 83 percent of all electrician licenses are in these two categories. The "A" contractor license is the most prevalent type of contractor license. Almost 90 percent of all contractor licenses are issued to "A" contractors.

2. LICENSE REQUIREMENTS

An electrician's or contractor's license is issued only after an applicant has met certain requirements. Renewal of a license is also contingent on meeting various requirements. These requirements are discussed below.

a. Contractor Licenses

An applicant for a contractor's license must: (1) be or employ a master electrician, (2) obtain a bond and insurance in the amounts specified by statute, (3) supply the business information required by board rules, and (4) pay the required fee. To renew a license, a contractor must continue to be or employ a master electrician, renew the bond and insurance, and pay a license renewal fee. Fees are established by the board in a rulemaking

¹⁴Minn. Stat. § 326.242, subd. 4 (1978).

TABLE 6
 LICENSES ISSUED DURING FISCAL YEAR 1978

<u>Electrician Licenses</u>	<u>Number</u>
"A" Master	2,560
"B" Master	300
"A" Journeyman	5,970
"B" Journeyman	496
Installer*	9
Lineman	130
Master Elevator Constructor	10
Journeyman Elevator Constructor	267
Limited	2
Maintenance	519
Total	<u>10,263</u>

<u>Contractor Licenses</u>	<u>Number</u>
"A" Contractor	1,690
"B" Contractor	195
Total	<u>1,885</u>

* Prior to May 22, 1979, there was only one class of installer license.
 (See Laws of 1979, ch. 121.)

hearing. Figure 4 depicts the requirements for obtaining or renewing a contractor's license.

b. Electrician Licenses

An applicant for an electrician's license must: (1) meet the relevant experience and education requirements set by statute or rule, (2) pass a written examination, and (3) pay the required fee. To renew an electrician's license requires only the payment of the renewal fee established by a board rule. At present, the board has no continuing education requirements but is studying the need for them. Figure 5 illustrates the steps involved in obtaining or renewing an electrician license.

3. BOARD ACTIVITIES

In issuing and renewing licenses, the board has a number of functions to perform. Among its major activities are:

1. The board may promulgate rules which regulate the work performed by various types of electricians or contractors.
2. The board must determine if each applicant for an electrician license meets the experience and education requirements for that license.
3. The board must approve the design and content of all examinations given to applicants for electrician licenses.
4. The board must promulgate rules which set the fees for examination, license issuance, and license renewal and establish the period between license renewals.

Each of these activities are described below in greater detail.

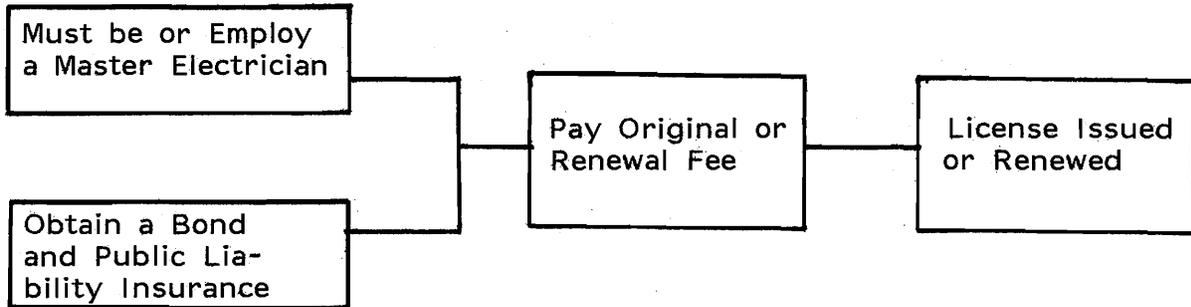
a. Rules Regulating Electricians and Contractors

Statutes generally place two types of restrictions on licensed electricians and contractors. First, the nature of the work or job duties performed

FIGURE 4

REQUIREMENTS FOR AN ELECTRICAL CONTRACTOR'S LICENSE

For Original and Renewal Licenses:*

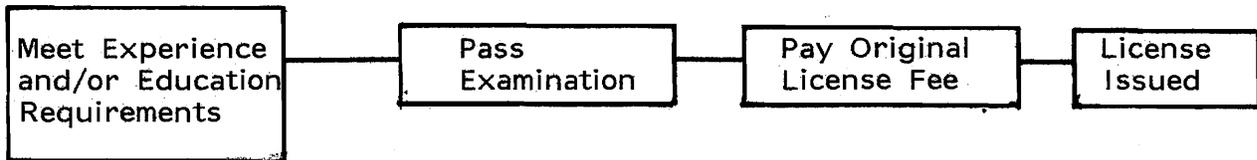


* An applicant for a contractor's license must also supply the business information required by 4 MCAR § 11.030B.

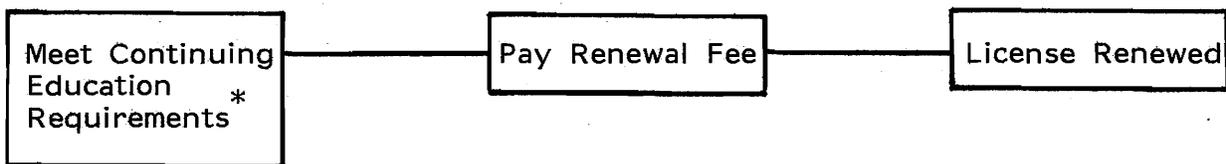
FIGURE 5

REQUIREMENTS FOR AN ELECTRICIAN'S LICENSE

For Original License:



For Renewal License:



* Currently, the Board of Electricity has no continuing education requirements.

by a licensee can be restricted. Second, a licensee may be restricted to working on certain types of electrical installations. Table 7 summarizes the restrictions placed on the various types of electricians and contractors in Minnesota.

State law also prescribes the conditions under which an unlicensed person may do electrical work. An unlicensed person working as an apprentice may do wiring for another person if he is under the "personal on-the-job supervision" of a licensed electrician.¹⁵ Any unlicensed person may do wiring on his own premises, but is required, as are all contractors, to have the wiring inspected by the board's employees.

The Board of Electricity has the authority to promulgate rules which carry out its statutory duties. As a result, the board can modify, to some extent, statutory work restrictions by promulgating administrative rules. The board can relax existing restrictions by establishing new categories of special electricians. Alternatively, the board can place additional restrictions on licensees.

Recently, the board has promulgated two new rules which place additional restrictions on licensed electricians and contractors. Effective October 8, 1979, the first rule requires that a master electrician can be responsible for the planning, lay out, and supervisory work of only one contractor. Prior to adoption of this rule, two or more contractors could share the services of one master electrician. Now, a contractor's license will not be renewed or issued if the master electrician designated by the contractor was also designated by another contractor.

The second new rule requires that an unlicensed person working as an apprentice must have "a licensed person on the job and providing super-

¹⁵Minn. Stat. § 326.242, subd. 5.

TABLE 7
LICENSING RESTRICTIONS ON ELECTRICAL WORK

<u>LICENSE CATEGORY</u>	<u>JOB DUTIES</u>	<u>TYPES OF ELECTRICAL WORK PERMITTED</u>
<u>Electricians:</u>		
"A" Master	Planning, lay out, and supervision	All
"B" Master	Planning, lay out, and supervision	Single phase systems of not over 200 ampere capacity for farms or single family dwellings in a town or municipality with less than 2,500 residents.
"A" Journeyman	Wiring, installing, and repairing	All
"B" Journeyman	Wiring, installing, and repairing	Single phase systems of not over 200 ampere capacity for farms or single family dwellings in a town or municipality with less than 2,500 residents.
Installer	Lay out and installing	Class A: Appliance installation on farmsteads or in towns with fewer than 1,500 residents, which are not contiguous with a city of the first class and do not contain the business of a licensed master electrician. Class B: Installation of center pivot irrigation booms and other equipment approved by the board.
Maintenance	Maintaining and repairing	Limited to work done while in the employ of an electrical contractor or as the full-time employee of a single employer within the limits of the property owned or leased by the employer.
<u>Contractor Licenses</u>		
"A" Contractor	Undertake or offer to undertake for another to plan, lay out, supervise, and install or to make additions, alterations, and repairs in the installation of electrical wiring, apparatus, and equipment for a fee or other compensation.	All
"B" Contractor	Undertake or offer to undertake for another to plan, lay out, supervise, and install or to make additions, alterations, and repairs in the installation of electrical wiring, apparatus, and equipment for a fee or other compensation.	Single phase systems of not over 200 ampere capacity for farms or single family dwellings in a town or municipality with less than 2,500 residents.

vision the entire working day."¹⁶ According to the board, courts had interpreted the statutes to mean that a licensed electrician could provide the required supervision by being present at the job site as little as five minutes per job regardless of the length of time it took to finish the job. The board contended that in order to receive on-the-job training, skilled supervision must be provided an entire working day.

b. Experience and Education Requirements

Statutes specify the amounts and general types of experience and education which qualify one to apply for an electrician's license. These experience and education requirements are listed in Table 8 for each of the statutory licenses and the one special electrician license. Generally, a class of electrician with greater responsibility and fewer limitations on its license must have more experience and/or training.

Statutes allow the board, however, to determine whether each applicant's experience and educational training is "acceptable to the board". As a result, the board must determine what particular types of experience qualify an applicant for a particular license. The board also has the responsibility to determine which post high school electrical courses an applicant can complete and receive experience credit for toward the "A" journeyman, maintenance, and installer licenses.

c. Examinations

Statutes require that all licensing boards use nationally standardized examinations to the extent that they are appropriate.¹⁷ National examina-

¹⁶For these new rules, see 4 MCAR § 11.030A and 4 MCAR § 11.031.

¹⁷Minn. Stat. § 214.03 (1978).

TABLE 8
EXPERIENCE AND EDUCATION REQUIREMENTS

<u>Electrician Licenses</u>	<u>Experience and Education Requirements</u>	<u>Examination Required</u>
"A" Master	<p>One year experience as a journeyman</p> <p style="text-align: center;">or</p> <p>Five years' experience in planning, laying out, supervising, and installing</p> <p style="text-align: center;">or</p> <p>Graduation from a four-year electrical course at an accredited college</p>	Yes
"B" Master	Three years' experience in electrical work	Yes
"A" Journeyman	Four years' experience in wiring, installing, and repairing (a minimum of one year of experience credit is allowed for successful completion of a two-year post high school electrical course)	Yes
"B" Journeyman	Two years' experience in wiring, installing, and repairing	Yes
"A" or "B" Installer	<p>One year's experience in electrical wiring</p> <p style="text-align: center;">or</p> <p>Completion of a post high school course in electricity</p> <p style="text-align: center;">or</p> <p>One years' experience</p>	Yes
Maintenance	Four years' experience in electrical maintenance and repair work (a maximum of one year of experience credit is allowed for successful completion of a two-year post high school technical course)	Yes

tions have not been developed, however, for electricians. Consequently, the Board of Electricity and its staff must design and develop its own examinations for ten different types of licenses.

The board has a full-time staff person, the electrical examiner, who is primarily responsible for developing, administering, and grading the exams. Other board staff also assist in administering and grading the exams.

Exams are administered at least once a month in the Twin Cities metropolitan area. About once every two years, the staff administers exams in Thief River Falls, Minnesota. Once every three years the board and its staff revise the examinations to incorporate the changes made to the National Electrical Code.

During fiscal year 1979, exams were given to 1,228 applicants. As Table 9 shows, the "A" master, "A" journeyman, and "B" journeyman exams are the most commonly administered exams. Approximately 90 percent of all examinations are given to applicants for these three types of licenses.

d. Fees

Since 1976, the Board of Electricity has had the authority to establish the fees charged for examinations, original licenses, and renewal licenses. If the board wishes to change a fee, it must do so by administrative rule, in compliance with the Administrative Procedures Act. The board is required, when changing a fee, to set the fee so that total anticipated fee revenues will equal total anticipated expenditures during the fiscal biennium.¹⁸ The board is also required by law to promulgate rules which establish the period of time that a license is valid and specify the procedures for renewing a license.

¹⁸Minn. Stat. § 214.06, subd. 1 (1978).

TABLE 9
NUMBER OF EXAMINATIONS ADMINISTERED
DURING FISCAL YEAR 1979

<u>Type of License</u>	<u>Number of Examinations</u>	<u>Percentage of Total Examinations</u>
"A" Master	326	27%
"B" Master	36	3
"A" Journeyman	572	47
"B" Journeyman	197	16
Maintenance	74	6
Installer	3	*
Lineman	6	*
Master Elevator Constructor	2	*
Journeyman Elevator Constructor	12	1
TOTAL	1,228	100%

* = Less than 0.5 percent.

Effective October 8, 1979, the Board of Electricity adopted rules concerning license and examination fees, and renewal periods. The board maintained the same fees that were established by law in 1967. The board also continued to require annual renewal of licenses.

B. BOARD POLICIES

During our evaluation, we examined the following aspects of the board's licensing activities:

1. The reasonableness of the board's rule prohibiting more than one contractor from designating the same master electrician;
2. The adequacy of the board's policies for determining if an applicant's experience and educational training is acceptable;
3. The adequacy of the design and content of license examinations; and
4. The reasonableness of the board's fee schedule and license renewal period, and the board's compliance with the fee schedule.

Findings and recommendations in each of these areas are presented and discussed below.

1. THE ONE MASTER/ONE CONTRACTOR RULE

a. Introduction

The Board of Electricity no longer permits more than one contractor to designate the same master electrician as responsible for the contractor's electrical work. In adopting the rule, the board cited two problems which would continue to exist without the rule:

1. It would be possible for a master electrician to be employed by several electrical contractors at the same time. This could create an atmosphere of price fixing on an installation, because of the master's access to all of the different contractor's records.
2. The "public interest" is not being served by master electricians who are employed by more than one electrical contractor.¹⁹

The board offered no evidence concerning the first problem. However, regarding the second problem, the board stated that it had "investigated many of the masters who are employed by more than one electrical contractor and find that the public interest is not in the minds of the master or electrical contractor." The board said that a master electrician is responsible for seeing that all of a contractor's electrical work is done according to the National Electrical Code and that qualified persons do the installation. The board consequently felt that improper work will more likely be done if a master electrician is supervising the electrical work of more than one contractor and that the "public interest" is not served by that. The board cited as evidence one case it had investigated. In that case, the master electrician and the contractor who employed him did not know each other.

A final problem mentioned at the rule hearing was that without the board's rule a person living outside of Minnesota can sign as a master electrician for a Minnesota contractor. If the master electrician lives in Arizona, for example, it is not likely that he is supervising any of the contractor's work. The master is merely lending or "selling his license" to the Minnesota contractor.

As approved by the Legislative Audit Commission, we examined the board's rationale for adopting this rule. We reviewed in detail the transcript of the rule hearing held on January 17, 1979 and all written comments sub-

¹⁹Statement of Need and Reasonableness, submitted to the Office of Hearing Examiners in Docket No. ELEC-79-001-GB (January 17, 1979).

mitted by interested parties. Most importantly, we developed additional information relevant to this rule but not submitted as evidence at the hearing.

b. Conclusions (●) and Findings (-)

Based on the results of our investigation, we conclude that the board's rule on master electricians and contractors may not be necessary. The additional information we have developed can be used by the legislature in considering the repeal of the rule. Our specific conclusions and findings follow below.

- There is no evidence that price fixing exists or, if it does exist, that the rule would have any impact on it. The board's claim that the rule would limit price fixing is unsubstantiated.
 - Neither the board nor anyone else at the hearing presented evidence that price fixing occurs.
 - No one presented evidence that the rule would limit the occurrence of price fixing.
 - If a contractor owns two separate shops and previously served as the master electrician for both, the rule cannot possibly prevent price fixing but could cause the contractor to close one shop, instead of hiring another master. This would restrict competition among contractors and likely cause consumer prices to rise.
 - Furthermore, the rule does not prohibit a master electrician from working for more than one contractor. It prohibits a master from being responsible for supervising more than one contractor's work. A master could still have access to more than one contractor's records.
- There is no evidence that the quality of work or public safety is affected if a master electrician is responsible for more than one contractor.
 - The board presented no evidence that contractors who share a master do work of poorer quality or violate code requirements more frequently than other contractors. In fact, as we pointed out in the previous chapter, the board does not maintain the records on code violations which it would need to address this issue.

- From the files available to us, it appears that the board has not had to notify the bonding company of contractors sharing a master any more frequently than for other contractors.²⁰
- The board has investigated relatively few cases in which a master electrician was responsible for more than one contractor's work.
 - According to board minutes, the board has investigated only three such cases over the last four and one half years.
 - Prior to adoption of the rule, there was a total of 107 master electricians whose services were being shared by 214 contractors.
- The board is already preventing any master electrician from being responsible for more than two contractors.
 - The board has a policy of reviewing all cases in which a contractor is applying for a license and is designating a master who is already shared by two other contractors.
 - Each of the three cases the board has had over the last four and one half years involved a third contractor wanting to share a single master electrician.
 - In each case, the board prohibited the master from serving three contractors, but permitted him to be shared by two.
 - There is no record in these cases that the master was unable to be responsible for two contractors at the same time or that the quality of the work performed by the contractors involved was unsatisfactory.
- The board's new rule will have little impact on the selling of licenses by non-residents.
 - The board's executive secretary was able to provide us with only one documented case in which a non-resident was a master for a Minnesota contractor but lived too far away to be providing supervision over the contractor's work.
 - The rule will not prevent a non-resident from being the master electrician for a Minnesota contractor. It will only prevent a non-resident, as well as any Minnesota resident, from being the master electrician for more than one Minnesota electrical contractor.
 - Since the board has already been preventing anyone from being the master for more than two contractors, this rule only prevents a non-resident from selling two licenses rather than one.

²⁰The board notifies a bonding company when a contractor refuses to comply with the code and does not appeal an inspector's order.

- There is evidence that for some electrical jobs a journeyman electrician is sufficiently skilled to plan, lay out, and supervise electrical work for a contractor.
 - According to the board and its staff, many journeyman electricians already do planning, layout, and supervisory work for electrical contractors, particularly on residential jobs. A majority of all electrical installations in Minnesota are on residential property.
 - In some states with electrical laws otherwise similar to Minnesota's, individuals with the same or less experience than "A" journeymen in Minnesota are permitted to be contractors on residential installations.
- The board has not taken into account the rule's impact on small contractors, particularly outside of the Twin Cities area.
 - Some small contractors, particularly in small towns or in rural areas, may not need the full-time services of a master electrician. Requiring them to have a full-time master may increase their costs and cause them to increase their prices.
 - Before promulgating this rule, the board and its staff did not examine those contractors who share a master to determine whether they need the services of a full-time master electrician.
- There are alternative means of achieving the board's objectives without this rule.
 - The board and its staff could periodically review the number of serious code violations committed by all contractors to see if disciplinary action should be considered. The board does not currently choose to revoke or suspend the license of a contractor who repeatedly violates the code. The board only takes such action if a contractor permits his bond or insurance to lapse or fails to pay the license renewal fee.
 - The board could continue as in the past to review cases in which a third contractor wishes to share a master.
 - The board could deny a contractor's license application if the contractor wishes to share a master, but the board determines that the master lives too far away from the contractor to serve the second contractor's business as well as the one the master is already supervising. This alternative would best be implemented by a rule change.

c. Recommendation

- The legislature should consider repealing the board rule which prevents a master electrician from supervising the work of more than one electrical contractor.

2. EXPERIENCE AND EDUCATION REQUIREMENTS

a. Introduction

Statutes define the amounts of experience and education required for various licenses, but permit the Board of Electricity to determine if the nature of each applicant's experience and education is acceptable. In this phase of our evaluation, we examined how the board has defined "acceptable" work experiences and educational training. In particular, we focused on two questions:

1. Does the board have consistently applied policies on what experience and training are acceptable?
2. Has the board complied with the Administrative Procedures Act by promulgating its policies as administrative rules?²¹

b. Conclusions (●) and Findings (-)

- The board does not have a policy for determining which post high school electrical courses are acceptable.
 - One board member with expertise in vocational education is responsible for investigating post high school electrical courses. No staff are assigned to this activity.
 - Board files contain insufficient information about the content of each approved or disapproved course.
 - The board does not have a minimum standard against which electrical courses are judged. Although some guidelines were developed in 1969, they have not been used for the past five years.
 - According to the board member responsible for this area, some vocational schools have revised their electrical courses in the past without notifying the board, because there is no requirement on notification.
- The board does have guidelines on "acceptable" work experiences, but the board's use of the guidelines does not comply with the Administrative Procedures Act.

²¹See Minn. Stat. § 15.0411-15.052 (1978) for the Administrative Procedures Act.

- The board's guidelines set maximums on the amounts of various types of work experiences which can be used in meeting the experience requirements for each license. The guidelines consequently affect the rights of license applicants.
- These guidelines have not been reviewed in a public hearing to determine whether they are necessary and reasonable.
- The Administrative Procedures Act requires that agency guidelines which have general applicability and future effect and which affect the rights of the public must be adopted as administrative rules.

c. Recommendations

- The Board of Electricity should develop criteria which can be used in evaluating post high school electrical courses. The standard should be promulgated as a rule and may require schools to report major curriculum changes to the board. The board's staff should maintain complete files on each approved course and on the board's rationale for disapproving any courses.
- If the Board of Electricity wishes to limit the amounts of various work experiences which can be used to satisfy the statutory experience requirements, then the board should promulgate these limitations as a rule, as required by state law.

3. EXAMINATIONS

a. Introduction

In our review of the board's licensing examinations, we addressed the following questions:

1. Are exams designed according to accepted testing principles?
2. Are exams designed to measure an individual's ability to perform electrical work satisfactorily?

We concentrated on two of the board's exams--those given to applicants for the "A" master and "A" journeyman licenses--because those exams are taken by 74 percent of all applicants and have the highest failure rates of all the board's exams.

b. Conclusions (●) and Findings (-)

- The "A" master and "A" journeyman examinations are well designed in some respects.
 - Since the early 1960's, the exams have used a multiple choice question format, which is a generally recommended testing method.
 - Most exam questions are taken directly or indirectly from the National Electrical Code book.
 - One-half of each exam is based on "open book" questions, for which the applicant is permitted to use the NEC book as a reference.
- There are some problems, however, with the design of the board's examinations.
 - The board and its staff do not have a testing plan which identifies the percentage of each exam which should be devoted to various topics such as wiring design, wiring protection, wiring methods, wiring materials, electrical equipment, and special installations and equipment. Exam revisions are made without sufficient regard for the overall composition of the exam, even though the board has sufficient staff to develop a testing plan.
 - The board has no data or information on the extent to which exam questions are an accurate measure of future on-the-job performance. As a result, neither the board nor we can say whether the exams are valid measures of the skills and knowledge needed for electrical work.
 - Decreasing passing rates on the "A" master and "A" journeyman exams may indicate that in some respects those exams are not properly designed. Table 10 shows that the percentage of applicants passing the "A" master exam has declined from 62 percent to 28 percent over a four year period. The percentage passing the "A" journeyman exam has declined from 72 to 40 percent over the same period.

c. Recommendations

- The board and its staff should develop an overall test plan which identifies the percentage of each exam which should be devoted to each subject area in the electrical field.
- The board should review in detail why the passing percentages for its two major exams, the "A" master and "A" journeyman, are unusually low.

TABLE 10

PASS RATES FOR MASTER AND JOURNEYMAN EXAMINATIONS*

	<u>Fiscal Year 1976</u>	<u>Fiscal Year 1977</u>	<u>Fiscal Year 1978</u>	<u>Fiscal Year 1979</u>
"A" Master	62%	45%	46%	28%
"A" Journeyman	72	53	58	40
"B" Master	79	70	74	61
"B" Journeyman	70	71	77	75

* In fiscal year 1979, these four examinations accounted for 93 percent of all examinations administered by the Board of Electricity.

Data Sources: Pass rates for fiscal years 1976, 1977, and 1978 were computed from information provided in the board's biennial reports to the legislature for 1974-76 and 1976-78. Rates for fiscal year 1979 were computed from board records.

4. FEES AND RENEWAL PERIODS

a. Introduction

The Board of Electricity is required to establish fees for original licenses, renewal licenses, and examinations and to set the period of time that a license is valid. In this section of the evaluation, we examined the following issues:

1. Does the board and its staff collect fees in proper amounts as required by statute and rules?
2. Would it be feasible to lengthen the period between license renewals and thus lower the costs of regulation?
3. Is the structure of the board's fee schedules for original and renewal licenses reasonable, considering the relative costs of issuing and renewing various types of licenses?

b. Conclusions (●) and Findings (-)

- The Board of Electricity's policy of renewing the master electrician licenses of its office staff, field supervisors, and contract inspectors free of charge violates Minn. Stat. § 326.242, subd. 8.
 - The licenses of the executive secretary, assistant executive secretary, electrical examiner, and some field supervisors are renewed each year without charge.
 - The licenses of contract inspectors are also renewed without charge. Inspectors are expected to assist in administering exams in return for their licenses. However, the board automatically renews without charge the licenses of all its contract inspectors holding master licenses regardless of whether they help administer exams. Furthermore, it is not necessary to have an inspector at the exams, since the electrical examiner, a field supervisor, and other staff already provide assistance.
 - Minn. Stat. § 326.242, subd. 8, requires that renewal fees must be paid for all licenses renewed, without exception. Minn. Stat. § 326.241, subd. 3, requires these fees to be deposited in the state's general fund.
 - The Board of Electricity does not deposit renewal fees for these licenses into the general fund. In 1978, the general fund failed to receive revenue totaling \$1,785 because of this policy.

- Lengthening the time between renewal of electrician licenses would be feasible and would reduce administrative costs.
 - Annual license renewal of electrician licenses is not a quality control mechanism. Licenses are automatically renewed upon receipt of the proper fee.
 - Because contractor licenses are renewed only after verification of proper bonding and insurance, a useful purpose is served by the annual renewal of contractor licenses.
 - Over a fiscal biennium, the board could save \$15,000 in personnel and mailing costs by renewing electrician licenses once every two years rather than annually; if these licenses were renewed once every three years, costs would be \$20,000 lower over the fiscal biennium.

- The board's fee schedules have not been revised or seriously studied since 1967.
 - Individual license fees do not reflect the administrative costs involved in issuing or renewing the licenses, and in regulating the licensees.
 - For example, it costs the board over \$7.50 on average simply to renew a contractor's license. On the other hand, it costs approximately \$1.50 to renew an electrician's license. Including overhead and other costs, it undoubtedly costs more than \$10 to renew a contractor's license and regulate each contractor's activities. Yet the renewal fee is only \$10 for a contractor but \$35 for an "A" master electrician.
 - A comparison of renewal fees in Minnesota to those in other states tends to support these findings. The average fee for renewing a contractor's license elsewhere is greater than \$50, compared to \$10 in Minnesota. The average fee for renewing a master's license is about \$21, compared to \$35 in Minnesota. In states with both contractor and journeyman licenses, the contractor renewal fee is on average more than five times greater than the journeyman renewal fee. In Minnesota, however, contractors pay \$10 compared to \$7.50 for journeyman electricians. (See Table 11.)

c. Recommendations

- The board should discontinue renewing the licenses of office staff and inspectors without charge.
- The board should revise its current rules so that electrician licenses are renewed at staggered intervals of at least two years.
- The board should seriously consider changing its fee schedules so that fees bear some relationship to administrative costs. Particular attention should be given to the relationship between fees paid by contractors and fees paid by master, journeyman, and other electricians.

TABLE 11
RENEWAL FEES IN OTHER STATES*

State	Annual Renewal Fees			
	Contractor	Master	Combination Master Contractor	Journeyman
Colorado	\$ 50	\$ 50	\$---	\$10
Connecticut	3.50	---	---	3.50
District of Columbia	30	15	---	10
Idaho	40	---	---	2
Maine	25	---	---	10
Massachusetts	---	---	20	5
Michigan	50	10	---	5
Minnesota	10	35	---	7.50
Montana	75	25	---	10
New Hampshire	---	---	25	15
Oregon	125	25	---	15
Rhode Island	45	---	---	5
South Dakota	25	---	---	10
Utah	20	10	---	5
Vermont	---	---	25	15
Washington	200	---	---	15
West Virginia	---	---	4	4
Wyoming	50	12.50	---	5

* Included are those states which license both contractors and journeyman electricians, and for which information was available from the Summary of Major Provisions of Electrical Code, Licensing and Enforcement Statutes of the 50 States and the District of Columbia, published by the National Electrical Contractors Association, Inc., Washington, D.C. (1977).

IV. GENERAL COMPLIANCE

This chapter presents findings and recommendations with regard to the board's compliance with (1) Chapter 214 of the Minnesota Statutes, which imposes certain requirements on all state examining and licensing boards, and (2) the Minnesota Open Meeting Law.²²

A. CHAPTER 214 REQUIREMENTS

1. COMPLAINT HANDLING AND INVESTIGATION

a. Introduction

Prior to July 1, 1977, Minnesota licensing boards were permitted to handle their own complaints. Since then, however, boards have been required to follow the formal complaint procedure established by Laws 1976, Chapter 222, Section 5.

This procedure requires that a representative of the Attorney General's Office direct the investigation of complaints against members of the

²²We did not initially propose to examine compliance in these areas. However, during our review of board inspection and licensing records, we became aware of these compliance problems and consequently included them in this report.

profession that a board regulates. The purposes of the procedure are: (1) to insure that a licensing board is not protecting members of its own profession against complaints by the public, and (2) to prevent a board from both investigating and adjudicating complaints which could result in disciplinary action taken against a member of its profession. The complaint procedure thus provides improved protection to the public.

b. Conclusions (●) and Findings (-)

- The public is not receiving full protection from the complaint procedure established by the legislature because the board, its management, and its staff do not process and investigate complaints in compliance with Minn. Stat. § 214.10, subd. 1 and 2 (1978).
 - Minn. Stat. § 214.10, subd. 1 (1978) requires each licensing board and its staff to forward to the designee of the attorney general all complaints or communications which allege or imply a violation of a statute or rule which the board is empowered to enforce. Complaints within the jurisdiction of another governmental agency must be forwarded to that agency.
 - Minn. Stat. § 214.10, subd. 2 (1978) requires that the designee of the attorney general evaluate the complaint to see if it alleges a violation of a statute or rule the board is to enforce. If it does, the designee is responsible for investigating the complaint and reporting the results of the investigation to the executive secretary of the board.
 - The executive secretary of the Board of Electricity and his staff do not send complaints to the attorney general's designee for evaluation as required in subdivision 1. Complaints and communications are routinely turned over to the field supervisors for investigation. The supervisors informally report their findings to either the assistant executive secretary or the executive secretary. According to the board's biennial report to the legislature, the board and its staff received 38 written and 360 oral complaints during fiscal year 1978. Of these, less than ten were sent to the attorney general's designee.
 - According to the executive secretary, the services of the attorney general's designee and an investigator from the attorney general's office are only requested in the relatively few cases that he or the assistant executive secretary feel a need to supplement the work of the board's staff.
- Management does not maintain adequate records of the complaints received and their disposition.

- No log is kept of complaints and communications received, their current status, or their ultimate disposition.
- It is not possible to determine the status or the disposition for many complaints from current complaint files.
- Records are not currently kept of all complaints.

c. Recommendations

- The board and its management should, after consultation with the Attorney General's Office, establish procedures for complaint handling in compliance with Minn. Stat. § 214.10 (1978). The attorney general's designee should indicate to the board (1) what types of complaints must be forwarded to him because they allege or imply a violation of a statute or rule enforced by the board, and (2) what types of complaints must be forwarded to other agencies.
- The board's management should keep a log of all complaints received.
- Management should maintain complaint records in an organized manner.

2. COMPENSATION OF BOARD MEMBERS

a. Conclusions (●) and Findings (-)

- Some board members are receiving compensation in excess of that permitted by Minn. Stat. § 214.09, subd. 3 (1978).
 - Minn. Stat. § 214.09, subd. 3 (1978) sets compensation for board members at \$35 per day spent on board activities, when authorized by the board, plus expenses in the same manner and amount as received by state employees" (emphasis added).
 - Department of Personnel rules prescribe the manner and amount of expenses received by state employees. These rules (2 MCAR, § 2.181B) permit reimbursement for dinner meals only if an employee is in a travel status and returns home after 7:00 p.m.
 - Two board members have been receiving reimbursement for a dinner meal on the day of each board meeting. Neither the board's minutes nor the board's biennial report indicate that these members are spending time on board activities during each afternoon following a board meeting. Since board meetings generally end at 12 noon or earlier and since these members live within 61 miles and 154 miles of the board's office, respectively, there is no justification for them to claim that board activities cause them to return home after 7:00 p.m.

- Furthermore, we note that other board members travel equivalent distances and do not claim reimbursement for a dinner meal.

b. Recommendation

- The board members involved should reimburse the state for the excess compensation they have received in the past and should discontinue submitting claims for this excess compensation. The board should disallow claims for expenses which are incurred while members are not on authorized board business.

B. OPEN MEETING LAW

1. CONCLUSIONS (●) AND FINDINGS (-)

- The board does not record the votes of board members in accordance with the Minnesota Open Meeting Law, Minn. Stat. § 471.705, (1978).
 - According to the executive secretary, the votes of individual board members are recorded only at the request of each member.
 - This practice violates Minn. Stat. § 471.705, subd. 1 (1978), as interpreted by the attorney general (Op. Atty. Gen., 125a-14, Feb. 28, 1975). The law requires individual votes of public officials to be recorded except for votes (1) on payments of judgments, claims, and amounts fixed by statute and (2) in disciplinary hearings involving quasi-judicial functions.
- The management can improve its procedures for notifying the public of special board meetings.
 - The board has a policy of holding special meetings whenever "major policy decisions are to be made."
 - Management has not provided notification to the public of these special meetings through a newspaper or the State Register. The meetings, which occur about once or twice a year, are sometimes not approved at regularly scheduled board meetings. A schedule of the regular meetings is posted at the board's office. The schedule for 1979, however, was not posted in a part of the office accessible to the public and did not list the special meeting that was held earlier in the year.
- Board subcommittee meetings are held in violation of the Open Meeting Law.

- No minutes are kept of subcommittee meetings.
- Subcommittee meetings have often been held at a restaurant rather than at the board's office.
- Meeting notices are not posted, but subcommittee meetings are often scheduled during regular meetings of the board.

2. RECOMMENDATIONS

- Individual board member votes should be recorded in a journal on all votes except those exempted by law.
- At a minimum, management should post a list of all scheduled meetings, both regular and special, at a predesignated location accessible to the public. The board should approve all future special meetings during regularly scheduled meetings, unless the situation requires an "immediate emergency action" involving public safety. The board should consider publicizing special meetings in the State Register to promote public participation in its decision-making process.
- Subcommittee meetings are subject to the Open Meeting Law and should be publicized and recorded in the same manner as required for full board meetings.