Preliminary Evaluation of the State Board of Master Electricians

Recommendation: Full Evaluation

The Sunset Review Process

This evaluation was undertaken under the auspices of the Maryland Program Evaluation Act (§ 8-401 *et seq.* of the State Government Article), which establishes a process better known as "sunset review" because most of the agencies subject to review are also subject to termination. Since 1978, the Department of Legislative Services (DLS) has evaluated about 70 State agencies according to a rotating statutory schedule as part of sunset review. The review process begins with a preliminary evaluation conducted on behalf of the Legislative Policy Committee (LPC). Based on the preliminary evaluation, LPC decides whether to waive an agency from further (or full) evaluation. If waived, legislation to reauthorize the agency typically is enacted. Otherwise, a full evaluation typically is undertaken the following year.

The State Board of Master Electricians was not scheduled for a preliminary evaluation under statute until 2010; however, DLS accelerated the review process for this board – along with several others – to more evenly distribute the number of evaluations conducted over the next few interims. The State Board of Master Electricians last underwent a full evaluation as part of sunset review in 2001. The 2001 full evaluation determined that there was a continued need for government oversight of master electricians and that the board was well run and received few complaints from the public or the profession regarding its licensees. As a result, DLS recommended that the board's termination date be extended by 10 years, that the board serve as a central repository of information on disciplinary actions taken against electricians at the State and local levels, and that master electricians report the number and location of all other licenses held. Chapter 163 of 2002 extended the termination date to July 1, 2013, and established the following reporting requirements:

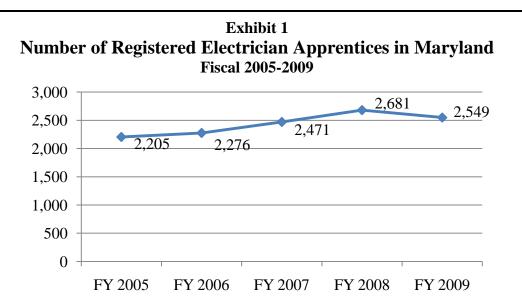
- a county or municipal corporation that requires a local license must report a disciplinary action against a licensee to the State board within 30 days of commencing the action;
- upon receipt of notice of a disciplinary action against a licensee, the State board must provide notice of the disciplinary action to each local licensing jurisdiction; and
- by December 1 of each year, each local licensing jurisdiction must submit to the State board the number of complaints against master electricians who are licensed in the local jurisdiction.

In conducting this preliminary evaluation, DLS staff interviewed board members and staff, licensees, and representatives of union and nonunion industry groups; reviewed State statutes and regulations pertaining to the State electrical industry; attended a board meeting; reviewed board meeting minutes; and visited the board's office. In addition, DLS staff analyzed data relating to the board's administration of licenses, complaints, and finances.

The State Board of Master Electricians reviewed a draft of this preliminary evaluation and provided the written comments attached at the end of this document as **Appendix 1**. Appropriate factual corrections and clarifications have been made throughout the document; therefore, references in board comments may not reflect the final version of the report.

Electricians in Greater Demand

According to the U.S. Bureau of Labor Statistics, the national demand for electrical workers will rise to more than 734,000 by 2014, 78,000 more than were employed in 2007. Moreover, although the recession has likely slowed the retirements of many experienced electricians, future retirements among electricians are certain to be most significant among the most experienced workers. Meanwhile, the work electricians will be asked to perform is changing rapidly due to emerging technologies like solar/photovoltaics and wind energy. As the demand for renewable energy increases, so too will the demand for electricians who can competently facilitate its supply. As demonstrated by **Exhibit 1**, the number of registered electrician apprentices has increased recently. However, the rise in the number of apprentices may not keep pace with the increased demand if a large number of veteran electricians retire soon, as is expected.



Note: The reported decrease from fiscal 2008 to 2009 resulted from apprenticeships that started in 2009 but were not registered until early fiscal 2010. As of October 23, 2009, 2,871 apprentice electricians were registered. Source: Maryland Apprenticeship and Training Program

State and Counties Share Overlapping Authority

The policy of the State is to regulate individuals who provide electrical services or engage in the business of providing electrical services, to safeguard the life, health, property, and public welfare of the citizens of the State. However, in most cases, a State license does not grant the licensee the authority to provide electrical services; instead, it facilitates the process of obtaining a local license needed to conduct electrical work in a specific jurisdiction or in Virginia, with which the State has a reciprocity agreement. All but two counties in the State maintain a local electrical board to provide for the licensing and regulation of electricians. As required by statute, counties with local boards must establish licensing qualifications comparable to those required by State law. Jurisdictions that opt not to regulate electricians must require a State license for providing electrical services as a master electrician. The only counties that do not maintain electrical boards are Allegany and Garrett, where a State license entitles a master electrician to work. The law also requires municipalities to either enforce the provisions of the Maryland Master Electricians Act, establish local licensing qualification requirements that are comparable to or more stringent than the State's, or adopt the regulations of the municipality's county.

Reciprocity between jurisdictions within Maryland was not set forth in law until 1976. Prior to then, electricians wishing to work in multiple jurisdictions had to take an examination required by each jurisdiction. Because jurisdictions typically offered examinations only twice per year, electricians often missed opportunities to bid on contracts while waiting to complete the license application process. In 1976, the General Assembly required local jurisdictions to waive examination requirements for qualified applicants holding a license from another jurisdiction. Because of real or perceived disparities in the difficulty level of examinations, some jurisdictions were reluctant to issue reciprocal licenses. Electricians believed that, given these concerns, local boards failed to process applications for reciprocal licenses in a timely manner.

The Maryland Uniform Electrical Licensing Examination Committee (MUELEC) facilitated the implementation of the reciprocity law. Committee members volunteered to develop a test bank of questions for all examinations offered by local jurisdictions, which helped ensure the same minimum qualification for license holders across jurisdictions, and eased jurisdictions' concerns about issuing reciprocal licenses. MUELEC members continue to revise the test bank of questions, which is based on the 2008 National Electrical Code, the most recent version of the code, which is updated every three years. Paradoxically, however, some local jurisdictions still enforce the 1999 version of that code. An independent but related committee, the Maryland Electrical Legislative Group, addresses other issues of concern to the industry, such as changes to the State's regulatory scheme.

The introduction of the State's master electrician's license in 1984 provided an additional vehicle for obtaining a reciprocal license. Master electricians, as the name implies, possess the broadest range of experience, knowledge, and skills within the profession to provide electrical services in all aspects of the electrical trade. Individuals without extensive experience in conducting electrical work may operate under more limited or restricted licenses granted by local jurisdictions. Restricted licenses typically permit an electrician to conduct work on specific

systems such as air conditioning, heating, and low-voltage signaling. Limited licenses generally specify that an electrician work on a particular type of property, such as single-family homes, or in a specified geographic area. In counties that do not offer licensure or these types of licenses, individuals conducting restricted or limited work are not regulated.

The State Board of Master Electricians Has Limited Authority

The State board consists of nine members appointed by the Governor with the advice and consent of the Senate, including six licensed master electricians and three consumers. Each member of the board must be a citizen of and reside in Maryland and may not reside in the same county as another member. Of the six master electrician members, one must be from the Eastern Shore; one must be from Baltimore City; one must be from Baltimore, Cecil, or Harford county; one must be from Anne Arundel, Calvert, Charles, or St. Mary's county; one must be from Montgomery or Prince George's county; and one must be from Western Maryland or Howard County.

With local jurisdictions having overlapping authority to license and regulate electricians, the State Board of Master Electricians has a small budget and employs only part-time staff. The board, located within the Division of Occupational and Professional Licensing, operates with direct assistance from four Department of Labor, Licensing, and Regulation (DLLR) staff persons, none of whom works exclusively for the board. One deputy commissioner provides policy direction and management for all boards and commissions within the division. He has oversight over operational support services such as personnel services, information technology, budget and procurement, and legislative affairs. Until recently, an executive director responsible for a total of four boards and commissions, oversaw and assisted with board operations. The executive director had access to division investigators to collect information about complaints. The executive director position, however, became vacant in February 2009 and still remains vacant; it is expected to be eliminated as part of cost containment measures. In the absence of an executive director, the assistant commissioner has directly overseen board operations while also providing oversight for certain other occupational and professional licensing boards. Assistant Attorney General provides legal counsel for the State Board of Master Electricians as well as four other boards and commissions within the division. The board also has a half-time administrative secretary to support the board's day-to-day functions; the position is shared with the State Board of Stationary Engineers.

While the board does not typically investigate complaints on its own, the board is authorized to discipline a licensee if a local jurisdiction reprimands, suspends, or revokes a license of a State licensee.

State Board Issues Three Types of Licenses

Although the board licenses only master electricians, it offers three categories of the license: active, inactive, and qualified agent. An active license allows an electrician to obtain reciprocal licenses and provide electrical services in two counties that do not have electrical

boards. As of June 2009, there were 1,360 active licensees in Maryland, an increase from the 992 active licensees as of June 1, 2000.

The board also offers an inactive license. These electricians typically work under the supervision of an active licensed master electrician who assumes responsibility for all work performed by the inactive licensee. Inactive licensees may also wish to maintain their classification as a State master electrician but do not anticipate providing electrical services or using reciprocity privileges. An inactive license can also save costs because general liability insurance is not required. As of June 2009, 874 individuals held inactive State licenses. The department also maintains data on a subset of inactive licenses held by inspectors. Inspectors that work at local permit and inspection offices typically do not provide electrical services and, as such, do not need an active license. Most inspectors are qualified to conduct electrical work, and they may wish to maintain an inactive license. The board issues identification cards to inspectors that identify master electricians who serve as inspectors. Of the 874 inactive licenses, 39 belonged to inspectors.

A large number of electricians are able to work under qualified agent licenses through the process of assignment. Qualified agent licenses are the third and most common category of license, with 2,670 licensees as of June 2009. The qualified agents assign their license to a company that provides electrical services. Individuals working for the company may conduct electrical work, and the qualified agent assumes responsibility for the work. The law does not limit the number of electricians that may work under the authority of a qualified agent.

Combining all categories of licenses, the board had a total of 4,943 licenses issued as of June 2009. Another 2,958 licenses were expired. If individuals with expired licenses apply for reinstatement within two years of expiration, meet the renewal requirements, and pay the appropriate fee, they may obtain a current license without taking the examination. The number of licenses issued by local jurisdictions is unknown.

To obtain a State license, an applicant needs seven years of experience providing electrical services for all types of electrical equipment and apparatus under the supervision of a master electrician or a similarly qualified employee of a governmental unit. With the board's approval, the applicant may count up to three years of formal education and training toward the experience requirement. All applicants, except those seeking inactive status, must maintain general liability insurance of at least \$300,000 and must maintain property damage insurance of at least \$100,000. Individuals may satisfy local jurisdictions' requirements for surety bonds by submitting proof of the insurance needed to obtain a State license.

Applicants must also pass an examination at the State or local level. Except under certain circumstances, applicants holding local licenses are exempt from the State examination requirement. The State examination is administered by a private testing service and contains questions from the test bank developed by MUELEC. The examination is open book, and the questions are derived from the National Electrical Code, which is updated every three years. The board is responsible for reviewing examination responses under dispute by the applicant. As shown in **Exhibit 2**, pass rates for the State exam are low. From October 2001 to June 2009, 2,457 candidates took the test but only 1,000 (41%) passed. One industry observer attributed this

to a lack of broad-based vocational knowledge among test-takers. Another industry observer noted that the examination is offered only in English. The board notes that electricians who are more familiar with changes in the National Electrical Code fare better on the examination, which reflects periodic changes to the code.

Exhibit 2 State Master Electrician Examination Pass Rates Fiscal 2005-2009						
	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	FY 2009	
Tested	367	311	273	293	278	
Passed	125	152	165	165	111	
Failed	242	159	108	128	167	
Pass Rate	34%	49%	60%	56%	40%	
Source: Department of Labor, Licensing, and Regulation						

Licensing fees are shown in **Exhibit 3**. The board issues staggered two-year licenses that may be renewed as long as applicants meet the renewal requirements, which vary among licenses but typically include paying a fee and submitting a renewal application. The board has considered adding continuing education requirements since at least the 2000 preliminary evaluation.

Exhibit 3 Schedule of Licensing Fees

	Original	Renewal
Master (Active)	\$20	\$25
Master (Inactive)*	20	50**
Qualified Agent	20	25
Change in Assignment of a Local License	50	N/A
	Initial	Reexamination

Master Electrician Examination Fee

*Inspectors with active licenses can change to inactive status upon payment of a \$50 inactive status fee. Inspectors may renew their inactive licenses free of charge.

\$65

\$65

**Master electricians must pay \$100 to reapply for inactive status and \$50 to reactivate from inactive status. Reinstatement fees for electricians who are not inactive are \$25 for 30-day late renewals, \$50 for 60-day late renewals, and \$100 for renewals that are more than 60 days late.

Source: Annotated Code of Maryland; Code of Maryland Regulations

Statutory and Other Changes Affecting the Board Since 2001 Sunset Review

Since the full evaluation in 2001, only one substantive statutory change has affected board operations. As described above, Chapter 163 of 2002 established several reporting requirements. In accordance with Chapter 163, the board receives information on individual disciplinary action dispositions from counties and municipalities and disseminates that information to the other local boards in a timely fashion. The board has not, however, prepared annual reports on complaints submitted to local jurisdictions. After the board made its initial data request to the local jurisdictions, reporting by local jurisdictions was sparse. Subsequently, the board did not request the information annually, and the local jurisdictions did not submit it. The Division of Occupational and Professional Licensing plans to send a letter to the subdivisions by the end of November 2009 reminding them of their obligation and requesting timely submittal of the data for fiscal 2009.

Complaint Resolution Is Rare at the State Level

Statute requires local jurisdictions to enforce licensing requirements. The State board, however, plays a limited role in complaint resolution and enforcement. DLLR staff handles most of the complaint activity that reaches the board. Most complaints concern the amounts charged by electricians and the timeliness with which electricians complete their work. If an issue merits review by the State board, staff requests a written complaint. For complaints that fall under the jurisdiction of a local board, DLLR staff makes an appropriate referral to the appropriate jurisdiction.

Upon receipt of a written complaint that warrants State action, the department notifies the electrician and requests a response within 10 days after the electrician receives notification. The department also sends a letter of acknowledgment to the complainant. The executive director reviews the information provided by the complainant and the electrician. The executive director may also ask a division investigator to collect additional information concerning the complaint. The executive director presents the complaint and the accompanying information to the board members and legal counsel at a board meeting. The members and counsel discuss possible courses of action and, if the matter warrants formal action, the board refers the case to the board's Assistant Attorney General for review. Upon approval by the Attorney General's Office, the board holds a formal hearing.

Because most complaints fall under the jurisdiction of local boards, the department receives a limited number of complaints and, consequently, rarely takes disciplinary action against licensees. Between 2004 and 2008, the board received 132 complaints. Only 8 complaints underwent review by the board; departmental staff referred the remaining 124 complaints to local jurisdictions. Of the 8 reviewed by the board, none resulted in any board action because there were no chargeable offenses.

A record of complaints referred to local jurisdictions appears in Exhibit 4.

Exhibit 4 Complaints Referred to Local Jurisdictions					
	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>
Complaints	23	23	22	30	26
Source: State Board of Master Electricians					

As referred to above, statute requires the State board to serve as a central repository on disciplinary actions taken against electricians at the State and local levels. Local licensing jurisdictions must inform the State board about disciplinary actions within 30 days of taking action. If an electrician holds a State license, the State board reviews the matter. In the past five years, the State board has received only 11 such referrals. Upon receipt of notice of a disciplinary action against a licensee, the State board must provide notice of the disciplinary action to each local licensing jurisdiction. Finally, by December 1 of each year, each local licensing jurisdiction must submit to the State board the number of complaints against master electricians who are licensed in the local jurisdiction. As discussed above, this last requirement has not been enforced.

Revenues Now Cover the Cost of Regulation

The General Assembly has a policy that regulatory bodies should, to the extent feasible, be self-supporting; however, boards should not charge licensees significantly more than necessary to maintain operations and cover the costs associated with regulation. **Exhibit 5** shows revenue and expenditure trends over the past five years. With modest increases in revenues from licensing fees over the past few years, the board now covers the costs of its work after operating with a small funding gap in fiscal 2005 and 2006. The board's limited revenues reflect its limited authority.

Exhibit 5 Fiscal History of State Board of Master Electricians Fiscal 2005-2010

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	(Est.) <u>FY2010</u>
Total Revenues	\$108,401	\$104,183	\$122,139	\$161,915	\$123,406	\$140,000
Total Costs	\$146,964	\$110,520	\$105,488	\$110,472	\$121,470	N/A
Direct Costs*	100,837	73,754	65,599	72,937	85,187	66,905
O&P Allocation	31,376	22,617	30,773	27,783	25,820	33,252
DLLR Indirect**	14,751	14,149	9,116	9,752	10,463	N/A
Surplus/(Gap)	(38,563)	(6,337)	16,651	51,443	1,936	N/A

O&P: Occupational and Professional Licensing

*DLLR began calculating legal costs for general fund boards in fiscal 2009. Those costs, which amounted to \$9,985, are included in the direct costs allocation for 2009.

**DLLR does not predict indirect costs because they are based on a federal cost allocation formula, which varies from year to year. The percentage has not yet been determined for 2010.

Source: Department of Labor, Licensing, and Regulation, Division of Occupational and Professional Licensing

Recommendation

There is a continued need for regulation of master electricians in the State to protect the public. However, given concerns about the adequacy of the State's regulatory powers, and the role of local jurisdictions in regulating electricians, the Department of Legislative Services recommends a full evaluation of the State Board of Master Electricians to address the following issues:

• The efficacy of maintaining multiple licensing schemes at the State and local levels: A full evaluation should look at the way electricians are regulated at the State and local levels to assess whether the overlapping schemes are efficient. This would include an assessment of State, county, and municipal licensing schemes. The evaluation should look at how these schemes are supporting or hindering the delivery of electrical services in the State, including the fiscal and operational implications of either strengthening the State's role or eliminating it.

- Whether the board should license other types of electricians: A full evaluation should assess whether the State should provide other types of licenses for individuals with less experience than master electricians.
- **Funding:** A full evaluation should look at whether the board should be special-funded. The board has supported establishing special fund authority so that it can set its own fees and engage in initiatives like requiring continuing education for license renewal that might require more funding to pursue. This review should be conducted in conjunction with the recommendation to review the appropriate role for the State board.
- **Enforcement:** A full evaluation of the board should investigate whether the board should have greater authority to investigate and discipline unlicensed, corrupt, or negligent electrical workers.
- **Continuing education:** A full evaluation should look at whether continuing education requirements should be imposed at the State level. An evaluation could also study ways to improve the relatively low examination pass rate.
- **Composition of the board:** A full evaluation should investigate whether the current geographical assignment of the board's membership adequately reflects the distribution of the State's current population.

Appendix 1. Written Comments of the State Board of Master Electricians



MARTIN O'MALLEY, Governor ANTHONY G. BROWN, Lt. Governor ALEXANDER M. SANCHEZ, Secretary

Division of Occupational and Professional Licensing Stanley J. Botts, Commissioner

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December 1, 2009

Mr. Michael C. Rubenstein Department of Legislative Services 90 State Circle Annapolis, MD 21401

Dear Mr. Rubenstein:

On behalf of the Department of Labor, Licensing and Regulation and the Board of Master Electricians, I wish to thank you for your letter and the draft copy of the Preliminary Evaluation of the State Board of Master Electricians.

I have reviewed the report and found no factual errors. We agree with the issues raised in the report's recommendations; however, we do not believe that eliminating the Board is a viable option. The safe delivery of electrical services in Maryland absolutely depends upon a strong and effective State Board.

We appreciate your support and the work of Andrew Johnston in preparing this report. We look forward to working with the Legislative staff to address the issues that were raised in the report as well as future issues which may arise. If you have any questions, please contact me at 410-230-6169.

Sincere

Steven Smitson Maryland State Board of Master Electricians

cc: Alexander M. Sanchez, Secretary Stanley J. Botts, Commissioner Harry Loleas, Deputy Commissioner Angela Cornish, Chair, Board of Master Electricians

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