<table>
<thead>
<tr>
<th><strong>Docket Number:</strong></th>
<th>13-ATTCP-01</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project Title:</strong></td>
<td>Acceptance and Training Certification</td>
</tr>
<tr>
<td><strong>TN #:</strong></td>
<td>214346-1</td>
</tr>
<tr>
<td><strong>Document Title:</strong></td>
<td>First Amendment - Application for Approval of NLCAA as Lighting Controls Acceptance Test Technician Provider</td>
</tr>
<tr>
<td><strong>Description:</strong></td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Filer:</strong></td>
<td>Patty Paul</td>
</tr>
<tr>
<td><strong>Organization:</strong></td>
<td>NLCAA</td>
</tr>
<tr>
<td><strong>Submitter Role:</strong></td>
<td>Public</td>
</tr>
<tr>
<td><strong>Submission Date:</strong></td>
<td>11/2/2016 2:30:03 PM</td>
</tr>
<tr>
<td><strong>Docketed Date:</strong></td>
<td>11/1/2016</td>
</tr>
</tbody>
</table>
FIRST AMENDMENT

NOTE: ... to the APPLICATION FOR APPROVAL OF NLCAA, (THE NATIONAL LIGHTING CONTRACTORS ASSOCIATION OF AMERICA), AS A LIGHTING CONTROLS ACCEPTANCE TEST TECHNICIAN PROVIDER. (Rev 04)

“This NLCAA evaluation examination may be administered as ‘Secure and timed online testing of course material ...’ as outlined on Page 05 of this document.”

Shall be considered to be appended to:

Page 14; and,

Paragraph 3 of page 15; and,

Paragraph 5 of page 17 of:

the APPLICATION FOR APPROVAL OF NLCAA, (THE NATIONAL LIGHTING CONTRACTORS ASSOCIATION OF AMERICA), AS A LIGHTING CONTROLS ACCEPTANCE TEST TECHNICIAN PROVIDER. (Rev 04)
§ 10-103-A (c) (iii) **Prequalification**

Individuals applying to NLCAA for Lighting Controls Acceptance Test Technician Training by virtue of Military Experience, Prior Certification, or Degree Earned may use this professional experience to *partially* fulfill the “... three years of verifiable professional experience and expertise in lighting controls and electrical systems” requirement.

Details may be found in Attachment 8, “Prequalification based on Military Experience, Certification, or Degree Earned”.

Prior to beginning training: prequalified NLCAA Lighting Controls Acceptance Test Technician Training Candidates must read, review and sign the “NLCAA Lighting Controls Acceptance Test Technician Associate Contract” (Attachment 12). NLCAA Lighting Controls Acceptance Test Technician Training Candidates must state that they are aware of any additional physical or monetary burdens they will face in the future as NLCAA Certified Lighting Controls Acceptance Test Technicians.

§ 10-103-A (c) (iv) **Instructor to Trainee Ratio**

To ensure integrity and efficacy of the curriculum and program, the personal experience of the CET Training Consultant suggests that a ratio of no more than 18 students per instructor is to be allowed for lectures and examination procedures – this applies to both the Lighting Controls Acceptance Test Technician curriculum and the Lighting Controls Acceptance Test Employer curriculum.

In the personal experience of the CET Training Consultant a ratio of no more than 9 students per instructor is to be allowed for overseeing the laboratory exercises which are part of the Lighting Controls Acceptance Test Technician curriculum.

§ 10-103-A (c) (v) **Tests**

As previously described under § 10-103-A (c) 3. A. Training Scope.

Lighting Controls Acceptance Test Technician candidates shall pass a 50 question multiple-choice examination to achieve certification – in addition to successful completion of hands-on training. A 70%, or greater, score on this examination will be required to pass the examination.

Also;

In addition to the requirements of: § 10-103-A (c) C. Lighting Controls Acceptance Test Employer Training:

Lighting Controls Acceptance Test Employer candidates shall pass a 27 question multiple-choice examination to achieve certification. A 70%, or greater, score on this examination will be required to pass the examination.

This NLCAA evaluation examination may be administered as ‘Secure and timed online testing of course material …’ as outlined on Page 05 of this document.
§ 10-103-A (c) B. (vi) Recertification

Regardless of the original date of certification of a Lighting Controls Acceptance Test Technician, (Field Technician), (as defined in §10-102 DEFINITIONS, of The 2013 Building Energy Efficiency Standards), recertification shall be required each time the Building Energy Efficiency Standards is updated with new and/or modified acceptance test requirements. In addition, NLCAA Directors may, at their discretion, require recertification when a new Building Energy Efficiency Standards is released as part of the “code cycle” process.

Regardless of the original date of certification of a Lighting Controls Acceptance Test Employer, (as defined in §10-102 DEFINITIONS, of The 2013 Building Energy Efficiency Standards), recertification shall be required each time the Building Energy Efficiency Standards is updated with new and/or modified acceptance test requirements. In addition, NLCAA Directors may, at their discretion, require recertification when a new Building Energy Efficiency Standards is released as part of the “code cycle” process.

Both Lighting Controls Acceptance Test Technicians, (Field Technicians), and Lighting Controls Acceptance Test Employers must pass an examination of 27 questions in length which consists of multiple-choice-type questions with four answers of which one and only one is the correct response. A participant achieving a score of 19 correct responses shall be deemed to have passed the written or interactive examination. A passing score on the examination is required for recertification. This NLCAA evaluation examination may be administered as ‘Secure and timed online testing of course material …’ as outlined on Page 05 of this document.

Prior to beginning recertification training¹: qualified NLCAA Lighting Controls Acceptance Test Technician Training recertification candidates must read, review and sign the “NLCAA Lighting Controls Acceptance Test Technician Associate Contract” (Attachment 12). NLCAA Lighting Controls Acceptance Test Technician Training Candidates must state that they are aware of any additional physical or monetary burdens they will face in the future as NLCAA Certified Lighting Controls Acceptance Test Technicians. The signing of this “NLCAA Lighting Controls Acceptance Test Technician Associate Contract” will render any previously signed and dated “NLCAA Lighting Controls Acceptance Test Technician Associate Contract” null and void. The NLCAA Lighting Controls Acceptance Test Technician shall be assumed to be operating under the current contract and any predated “NLCAA Lighting Controls Acceptance Test Technician Associate Contract(s)” shall be considered null and void.

Prior to beginning recertification training¹: qualified NLCAA Lighting Controls Acceptance Test Employer Training recertification candidates must read, review and sign the “NLCAA Lighting Controls Acceptance Test Employer Associate Contract” (Attachment 11). NLCAA Lighting Controls Acceptance Test Employer Training Candidates must state that they are aware of any additional physical or monetary burdens they will face in the future as NLCAA Certified Lighting Controls Acceptance Test Employers. The signing of this “NLCAA Lighting Controls Acceptance Test Employer Associate Contract” will render any previously signed and dated “NLCAA Lighting Controls Acceptance Test Employer Associate Contract” null and void. The NLCAA Lighting Controls Acceptance Test Technician Employers shall be assumed to be operating under the current contract and any predated “NLCAA Lighting Controls Acceptance Test Employer Associate Contract(s)” shall be considered null and void.
§ 10-103-A (c) C. Lighting Controls Acceptance Test Employer Training.

§ 10-103-A (c) 3. A. Training Scope.

Acceptance Test Technician Employer Training - “REV01B”

Theoretical training such that Acceptance Test Technicians Employers demonstrate their understanding of the Building Energy Efficiency Standards acceptance testing and documentation requirements shall include (but not be limited to), course material provided by methods listed to address:

“... The Certification Provider(s) shall provide reasonable access to certification ... class availability”

The quizzes shall be of varying length and consist of multiple-choice-type questions with four answers of which one and only one is the correct response.

The examination shall be 27 questions in length and consist of multiple-choice-type questions with four answers of which one and only one is the correct response. An applicant achieving a score of 19 correct responses shall be deemed to have passed the written or interactive examination. A passing score on the examination is required for certification. This NLCAA evaluation examination may be administered as ‘Secure and timed online testing of course material ...’ as outlined on Page 05 of this document.

Theoretical training topics shall include, (but not be limited to), the topics presented in Attachment 3: “Acceptance Test Technician Employer Class Outline”

Practical training such that Acceptance Test Technicians Employers demonstrate their understanding of the Building Energy Efficiency Standards acceptance testing and documentation requirements shall include (but not be limited to), a demonstration which allows the collection of illuminance data to be observed and analyzed to provide proper values for entry on acceptance testing form: NRCA-LTI-03-A. The demonstration generates measurements taken on the following simulated scenario:

1) Continuously Dimmed Closed-Loop Daylighting System

Prior to beginning certification training: prequalified NLCAA Lighting Controls Acceptance Test Employer Training certification candidates must read, review and sign the “NLCAA Lighting Controls Acceptance Test Employer Associate Contract” (Attachment 11). NLCAA Lighting Controls Acceptance Test Employer Training Candidates must state that they are aware of any additional physical or monetary burdens they will face in the future as NLCAA Certified Lighting Controls Acceptance Test Employers.

“... reasonable access to certification ... considering factors such as certification costs commensurate with the complexity of the training being provided, prequalification criteria, class availability, and curriculum.”
§ 10-103-A (c) B. (iii) Prequalification

Individuals applying to NLCAA for Lighting Controls Acceptance Test Technician Training by virtue of Military Experience, Prior Certification, or Degree Earned may use this professional experience to partially fulfill the “... three years of verifiable professional experience and expertise in lighting controls and electrical systems” requirement.

Details may be found in Attachment 8, “Prequalification based on Military Experience, Certification, or Degree Earned”.

Prior to beginning training: prequalified NLCAA Lighting Controls Acceptance Test Technician Training Candidates must read, review and sign the “NLCAA Lighting Controls Acceptance Test Technician Associate Contract” (Attachment 12). NLCAA Lighting Controls Acceptance Test Technician Training Candidates must state that they are aware of any additional physical or monetary burdens they will face in the future as NLCAA Certified Lighting Controls Acceptance Test Technicians.

§ 10-103-A (c) B. (iv) Instructor to Trainee Ratio

To ensure integrity and efficacy of the curriculum and program, the personal experience of the CET Training Consultant suggests that a ratio of no more than 18 students per instructor is to be allowed for lectures and examination procedures – this applies to both the Lighting Controls Acceptance Test Technician curriculum and the Lighting Controls Acceptance Test Employer curriculum.

In the personal experience of the CET Training Consultant a ratio of no more than 9 students per instructor is to be allowed for overseeing the laboratory exercises which are part of the Lighting Controls Acceptance Test Technician curriculum.

§ 10-103-A (c) B. (v) Tests

As previously described under § 10-103-A (c) 3. A. Training Scope.

Lighting Controls Acceptance Test Technician candidates shall pass a 50 question multiple-choice examination to achieve certification – in addition to successful completion of hands-on training. A 70%, or greater, score on this examination will be required to pass the examination.

Also;

In addition to the requirements of: § 10-103-A (c) C. Lighting Controls Acceptance Test Employer Training:

Lighting Controls Acceptance Test Employer candidates shall pass a 27 question multiple-choice examination to achieve certification. A 70%, or greater, score on this examination will be required to pass the examination.

This NLCAA evaluation examination may be administered as ‘Secure and timed online testing of course material ...’ as outlined on Page 05 of this document.
§ 10-103-A (c) B. (vi) Recertification

Regardless of the original date of certification of a Lighting Controls Acceptance Test Technician, (Field Technician), (as defined in §10-102 DEFINITIONS, of The 2013 Building Energy Efficiency Standards), recertification shall be required each time the Building Energy Efficiency Standards is updated with new and/or modified acceptance test requirements. In addition, NLCAA Directors may, at their discretion, require recertification when a new Building Energy Efficiency Standards is released as part of the “code cycle” process.

Regardless of the original date of certification of a Lighting Controls Acceptance Test Employer, (as defined in §10-102 DEFINITIONS, of The 2013 Building Energy Efficiency Standards), recertification shall be required each time the Building Energy Efficiency Standards is updated with new and/or modified acceptance test requirements. In addition, NLCAA Directors may, at their discretion, require recertification when a new Building Energy Efficiency Standards is released as part of the “code cycle” process.

Both Lighting Controls Acceptance Test Technicians, (Field Technicians), and Lighting Controls Acceptance Test Employers must pass an examination of 27 questions in length which consists of multiple-choice-type questions with four answers of which one and only one is the correct response. A participant achieving a score of 19 correct responses shall be deemed to have passed the written or interactive examination. A passing score on the examination is required for recertification. This NLCAA evaluation examination may be administered as ‘Secure and timed online testing of course material …’ as outlined on Page 05 of this document.

Prior to beginning recertification training¹: qualified NLCAA Lighting Controls Acceptance Test Technician Training recertification candidates must read, review and sign the “NLCAA Lighting Controls Acceptance Test Technician Associate Contract” (Attachment 12). NLCAA Lighting Controls Acceptance Test Technician Training Candidates must state that they are aware of any additional physical or monetary burdens they will face in the future as NLCAA Certified Lighting Controls Acceptance Test Technicians. The signing of this “NLCAA Lighting Controls Acceptance Test Technician Associate Contract” will render any previously signed and dated “NLCAA Lighting Controls Acceptance Test Technician Associate Contract” null and void. The NLCAA Lighting Controls Acceptance Test Technician shall be assumed to be operating under the current contract and any predated “NLCAA Lighting Controls Acceptance Test Technician Associate Contract(s)” shall be considered null and void.

Prior to beginning recertification training¹: qualified NLCAA Lighting Controls Acceptance Test Employer Training recertification candidates must read, review and sign the “NLCAA Lighting Controls Acceptance Test Employer Associate Contract” (Attachment 11). NLCAA Lighting Controls Acceptance Test Employer Training Candidates must state that they are aware of any additional physical or monetary burdens they will face in the future as NLCAA Certified Lighting Controls Acceptance Test Employers. The signing of this “NLCAA Lighting Controls Acceptance Test Employer Associate Contract” will render any previously signed and dated “NLCAA Lighting Controls Acceptance Test Employer Associate Contract” null and void. The NLCAA Lighting Controls Acceptance Test Technician Employers shall be assumed to be operating under the current contract and any predated “NLCAA Lighting Controls Acceptance Test Employer Associate Contract(s)” shall be considered null and void.
§ 10-103-A (c) C. **Lighting Controls Acceptance Test Employer Training.**

§ 10-103-A (c) 3. **A. Training Scope.**

Acceptance Test Technician Employer Training - “REV01B”

Theoretical training such that Acceptance Test Technicians Employers demonstrate their understanding of the Building Energy Efficiency Standards acceptance testing and documentation requirements shall include (but not be limited to), course material provided by methods listed to address:

“... The Certification Provider(s) shall provide reasonable access to certification ... class availability”

The quizzes shall be of varying length and consist of multiple-choice-type questions with four answers of which one and only one is the correct response.

The examination shall be 27 questions in length and consist of multiple-choice-type questions with four answers of which one and only one is the correct response. An applicant achieving a score of 19 correct responses shall be deemed to have passed the written or interactive examination. A passing score on the examination is required for certification. This NLCAAA evaluation examination may be administered as ‘Secure and timed online testing of course material ...’ as outlined on Page 05 of this document.

Theoretical training topics shall include, (but not be limited to), the topics presented in Attachment 3: “Acceptance Test Technician Employer Class Outline”

Practical training such that Acceptance Test Technicians Employers demonstrate their understanding of the Building Energy Efficiency Standards acceptance testing and documentation requirements shall include (but not be limited to), a demonstration which allows the collection of illuminance data to be observed and analyzed to provide proper values for entry on acceptance testing form: NRCA-LTI-03-A. The demonstration generates measurements taken on the following simulated scenario:

1) **Continuously Dimmed Closed-Loop Daylighting System**

Prior to beginning certification training: prequalified NLCAAA Lighting Controls Acceptance Test Employer Training certification candidates must read, review and sign the “NLCAAA Lighting Controls Acceptance Test Employer Associate Contract” (Attachment 11). NLCAAA Lighting Controls Acceptance Test Employer Training Candidates must state that they are aware of any additional physical or monetary burdens they will face in the future as NLCAAA Certified Lighting Controls Acceptance Test Employers.

“... reasonable access to certification ... considering factors such as certification costs commensurate with the complexity of the training being provided, prequalification criteria, class availability, and curriculum.”