

FALL 2024 REQUEST FOR PROPOSALS

Summary Proposal Deadline: Friday, September 13, 2024, 5:00 PM EDT

PURPOSE

ELECTRI International – The Foundation for Electrical Construction - invites summary proposals from research organizations, and/or individual researchers, consultants and subject matter experts interested in studying and reporting on topics related to Electrical Construction (EC).

ELECTRI's research selection process, via proposal submission and review, is open to any qualified organization or researcher interested in expanding the knowledge of electrical construction. ELECTRI's goal is to have highly-qualified researchers and industry experts addressing important topics that will provide value to the electrical contracting industry and its stakeholders.

The Foundation's interests include business aspects of running an electrical construction company, managing projects, supply chain management, field operations, and electrical systems design. These interests encompass all aspects of electrical construction from building systems (including low voltage systems) to transportation and infrastructure, power generation, transmission, and distribution.

BACKGROUND

Since 1901, the National Electrical Contractors Association (NECA) has represented electrical contractors, and has focused its efforts on improving the contractor's ability to work efficiently and effectively. In December 1988, NECA established a separate, independent organization, **ELECTRI International - The Foundation for Electrical Construction Inc.** to serve as the guiding force in preparing the electrical contracting industry for the challenges of the 21st Century.

The Foundation promotes and advances the ability of electrical contractors to meet the demands of today and the challenges of the future. ELECTRI is an international organization through which leaders of NECA and other segments of the electrical contracting industry work together to fund, conduct, and coordinate the industry's most critical research and educational programs. The ELECTRI Council, including EC contractors, NECA Chapters, and industry allies, have each made a financial investment in ELECTRI and are committed to advancing ELECTRI's research and education agenda.

PROPOSAL TOPIC DEVELOPMENT AND RESEARCH METHODS

Researchers/Research Organizations and industry experts may submit up to three proposals in total. The narrative should clearly designate the preferred research method for each proposal submitted.

Researchers are strongly advised to review the list of research projects that have received ELECTRI funding in the past (see <https://electri.org/research-overview/research>) either to avoid repeating topics, or to use a previously funded topic as the basis for a follow-on research initiative. It is free to make an account.

Researchers are encouraged to develop and submit a concept paper that demonstrates relevance to the electrical construction industry. Several concepts may naturally combine under one project. **The Foundation's tendency is to encourage applied research.** Mail/e-mail surveys have proven to be less effective than interviews and/or company field visits. Research applied in companies has proven to be the most useful.

RESEARCH METHODS AND AREAS OF INTEREST

For the 2024 Fall ELECTRI research cycle, the ELECTRI Council proposes three distinct research methods and has also recommended areas of interest to meet present and future demands of the EC industry. ELECTRI International is confident these three research methodologies will provide electrical contractors with the most relevant industry information in a format that is more consumable for all ECs. Please note that research project topics can fall into more than one category.

Proposed Research Methods:

Traditional Research – The selected researcher(s) will lead the project effort with support from an ELECTRI assigned task force. A mandatory three-page executive summary is required for all traditional research. ELECTRI expects the deliverable(s) from this type of research initiative to be submitted in final form no longer than six months (or a timeline agreed upon by the researcher and ELECTRI) following the award start date for the project.

Focus Group with Moderator Research – The focus group relies upon its collective industry knowledge to address areas of interest that require experience to best determine successful outcomes. It is the role of the moderator to propose processes that best engage the task force to produce quality deliverables that will benefit the industry. The moderator is responsible to guide and coordinate task force efforts and then produce final deliverables. Examples of final deliverables include products such as whitepapers, webinars, videos, etc. ELECTRI expects the deliverable(s) from this type of research initiative to be submitted in final form no longer than three months following the award start date for the project.

Subject Matter Expert Research – The selected researcher(s) will each be a recognized specialist in the proposed area of interest. The researcher(s) will work with an ELECTRI assigned task force to provide information that helps bring together the research and its impact on electrical contractors. The final deliverables will include a whitepaper and educational webinar. ELECTRI expects the deliverable(s) from this type of research initiative to be completed no longer than three months following the award start date for the project.

Suggested areas of interest have been identified for each proposed research method; **however, we also welcome proposals on other topics relevant to the electrical construction industry:**

Traditional Research:

- **Electrical Construction Growth Markets:** Blue Ocean vs. Red Ocean Opportunities - actionable insights into untapped, innovative market spaces (Blue Oceans) where competition is minimal and potential for growth is significant, as well as to highlight the highly competitive, saturated markets (Red Oceans) where strategies need to be more focused (specialized) on differentiation and cost leadership.
- **Department of Energy (DOE):** analyze projects currently being funded by the Department of Energy (DOE). Through detailed research, identify and evaluate these projects to determine the top five that are likely to have the most significant impact on electrical contractors over the next 5-10 years.
- **Recurring Revenue Business Models:** Exploring strategies for building recurring revenue business models, with a focus on key considerations and compliance with NFPA 70B & 70E.

- **Fleet Management:** identify fleet management best practices for purchasing or leasing vehicles, managing fleets, maintaining stock, and tracking tools and materials, including evaluating GPS tracking, service, and maintenance strategies, with an emphasis on using these practices as a safety tool.
- **Modular Construction:** Proposals should analyze the future impact of modular construction on trade contractors, examining both opportunities and risks. Consider general contractors purchasing materials directly and prefabbing and/or premanufacturing electrical components. Focus on the impact this shift has on electrical contractors. The research should include recommended responses and strategies, leveraging insights from subject matter experts (SMEs) to provide actionable lessons learned.

Focus Group with Moderator Research:

- **Productivity Enhancement:** Enhancing productivity in the electrical contracting industry, including incentivizing strategies and stakeholder engagement for tackling current challenges, incorporating moderated conversations, and drawing insights from HR firms and other industries.
- **Submittal Process Optimization:** optimizing the submittal process in the electrical contracting industry, ensuring accuracy and compliance with project specifications. This includes exploring strategies for maintaining effectiveness, utilizing potential technology solutions, and best practices for clear communication to minimize errors and delays. The proposal should consider the workshop format as optimal, ensuring that key stakeholders are present to drive significant advancements in this critical process.
- **Broken/Out-of-date Project Management Processes:** Conduct research on out-of-date or broken project management processes that remain unchanged, identify the cost and time savings by utilizing a collaborative approach.

Subject Matter Expert Research:

- **Cybersecurity:** address cybersecurity and ransomware challenges specific to electrical contracting, including monitoring strategies, and contractual considerations to safeguard data and systems.
- **Practical AI Training:** practical AI training, addressing the setup of chatbots and the creation of instructional videos ("how-to", AI 101, etc.) tailored for the electrical contracting industry. The goal is to facilitate effective AI integration to enhance everyday operational efficiency and service delivery. Consider security concerns and data privacy.

PROJECT COST

Any overhead or travel cost to complete the proposed research should be included in the proposed budget for each project submitted. A maximum of 10% may be charged for an indirect cost rate with proper documentation. ELECTRI expects to select valuable projects to be identified and moved forward for full proposal consideration by the ELECTRI Council.

CONTRACT TIME

Project duration is a critical part of the proposal. The selected topics are of essential importance to the EC industry and projects need to be completed expeditiously. Projects should be initiated as soon as possible after award of contract and must be completed according to the timing detailed in each of the three methodologies above. ELECTRI anticipates that each contract will be finalized within 30 days of the award notification. The researcher's anticipated time frame for project execution should be clearly stated in the proposal.

SUMMARY PROPOSAL

1. PLEASE note that the **proposal body must fit the one-page format or it will not be accepted**. This one-page summary format allows the ELECTRI International Program Review Committee to evaluate the information more efficiently.
2. ELECTRI International will request submittal of full proposals based on project selections made by its Program Review Committee.
3. At the top of the proposal, clearly identify which research method is to be used.
4. ELECTRI International will provide feedback on each summary proposal, upon request.
5. **Electronic submittals are required** and ELECTRI will provide a receipt confirmation by e-mail. Please send e-mail document as a PDF attachment to **Amanda Harbison** at amanda@electri.org. **Please name the e-mail subject line as: 2024 Fall Summary Proposal.**
6. **Only summary proposals received by 5:00 PM EDT on September 13, 2024**, will be accepted and included in the review process.
7. Late submissions of summary proposals or those that do not follow submission guidelines will not be considered.

SUBMISSION FORMAT FOR SUMMARY PROPOSAL

Cover page

Submit a cover page that includes the following information:

- For each participating researcher: Name, title, institution, address, e-mail address(es). Include the phone and fax number for the Principal Investigator
- Short summary of the Principal Investigator's qualifications
- Identify which research method will be used for the proposed project.
- Timeframe to complete the proposed research successfully.
- Clearly identify previous research in this topic area and any resulting publications.

Proposal Outline

The summary proposal (**one page only**) should include brief descriptions of the following:

1. **Title of project and a single figure for the estimated total budget.** Details are not necessary, but the total should include administrative costs and any potential travel cost associated with research (Examples: focus group meetings, contractor site visits, jobsites, etc.).
2. **A letter of support** from a NECA Contractor, NECA Chapter, or ELECTRI Council member endorsing the proposed project.
3. **A three-minute video** submitted via **YouTube** with closed captioning. Please ensure the settings of the

video allow for embedding.

4. **Purpose and justification:** Describe how the project is relevant and useful to the electrical contractor and define the intended audience of the final product (e.g., Electrical Contractor Executives, Project Managers, other organizations). Explain what conditions in the electrical contracting industry justify the need for this research.
5. **Outcome and dissemination:** Describe the format of the physical end product/publication (manual, video, online, or other) *and* how you think this product will be used by the intended electrical contracting audience at the time of publication and into the future 3, 5, or 10 years out. Indicate whether the end result of this research project could be transformed into a seminar to be taught through NECA Education in a live or on-line format. Offer any other options for disseminating these research results that can be used to reach the intended audience.
6. Clearly state whether this project is considered the first of a series or if it will be self-contained. Although it is recognized that future research opportunities are often identified as a project is carried out, **ELECTRI International discourages projects that will extend into follow-up phases unless a clear and strong justification is provided.**
7. **Brief description of work plan or method of research:** The Summary Page should also include related research projects completed by the proposed researcher or team. Please indicate if undergraduate or graduate students will be engaged in the research process. Additionally, since ELECTRI promotes applied research, a demonstration of the research in an industry setting is encouraged.
8. Clearly state the researcher(s) willingness to accept the terms of the ELECTRI Research Agreement.

TIMELINE

DATE OF 2024 FALL RFP:	<u>AUGUST 14, 2024</u>
Deadline Summary Proposal Submission:	<u>Friday, September 13, 2024 - 5:00 pm EDT</u> A cover sheet, three-minute video, and one-page summary of the proposed project must be submitted electronically to amanda@electri.org with the subject heading: 2024 Fall Summary Proposal . Please review RFP information and format.
Notification of Full Proposal Submission:	<u>Wednesday, October 9, 2024</u> Researcher will be notified if his/her proposal has been selected for further review and requires submission of a full proposal. See section on information for full proposals.
Deadline Full Proposals Submission:	<u>Friday, January 3, 2025 - 5:00 pm EDT</u> If requested, researcher must submit full proposal electronically along with three-minute video proposal (include close captioning) summarizing the research to amanda@electri.org with the subject heading: 2024 Final Fall Proposal .
Announcement of Research Grant:	<u>Wednesday, January 22, 2025</u> Research grant announcements will be confirmed electronically.

GUIDELINES FOR THE FULL PROPOSAL

Researchers will be notified by October 9, 2024, if ELECTRI requests a full proposal based on the summary proposal.

In preparing the final proposal, please follow the outline below. ELECTRI's goal is to receive and review proposals that succinctly and clearly display project objectives.

1. Cover Page (1 page maximum)

- a. Applicant(s) - include name, mailing address, e-mail address, phone and fax of primary applicants and subcontractor.
- b. Title of project and method of research proposed.
- c. Project Summary (define the objective and final product and explain why it is needed).

2. The Proposal (5-page maximum)

- a. Introduction and Justification: Describe the problem or issue identified in the proposal, the construction industry conditions and current practices related to this research and, specifically, what is needed to address these issues.
- b. Goals and Objectives: Describe major product(s) or purpose of the project and how the product(s) will be used by electrical contractors and the electrical industry at publication and on into the future for 3, 5, or 10 years. Who specifically is the intended audience of the research results?
- c. Work Plan:
 - Provide a detailed description of the deliverables that will be produced and when they will be completed.
 - Include a schedule that explains major milestone and completion dates.
 - List the timing of any project task force meetings and the objectives of these meetings
 - List personnel who will be required and which segments of the electrical contracting and electrical industry allies will be included. **We encourage researchers to break down cost for each aspect of the work plan.**
 - Segment costs for each aspect of the Work Plan.
 - Submit a three-minute video via **YouTube** and include closed captioning summarizing the research plan.
- d. Product Information Dissemination - The researcher must be prepared to describe ways the final product will be presented and the audience(s) for which each product is intended:
 - Describe the type of event(s) at which the final product will be introduced (e.g., seminars at the NECA national convention or other forums).
 - Provide an overview article that will be developed for industry press to define progress and the results of the project.
 - Determine if this research product could be developed into a course to be taught through NECA Education in a live or on-line format.
 - Explain what other mechanisms could be used to disseminate the results to both contractors and other members of the construction industry.
 - Be available for a 20-minute ELECTRI podcast on the final research to help disseminate the findings and recommendations to the industry.
- e. Benefit to the Industry: Define what the direct benefits of the research will be for contractors, distributors, utilities, manufacturers, and/or other industry allies at the time of publication and into the future for 3, 5, or 10 years.

3. Personnel (Half-page per researcher)

Provide a short biography for each project researcher. Clearly indicate relevant qualifications and status of previous/current ELECTRI International research.

4. Budget (Separate page – 1-page summary)

It is not necessary to include budget notes unless ELECTRI requests further information on a specific item.

5. Research Agreement

State the researcher(s) willingness to accept the terms of the ELECTRI Research Agreement.

FINAL PROPOSAL ELEMENTS, REVIEW, AND PROJECT MONITORING

1. **Electronic submittals are required** and ELECTRI will return a receipt confirmation by email. Please send your e-mail as a PDF document as an attachment to: Amanda Harbison at amanda@electri.org with the subject line: **2024 Final Fall Proposal**.
2. The total proposal, including cover and budget pages, shall not exceed eight pages, unless there are more than two researchers, and the total number of biographies requires more than one page.
3. The final proposal must be submitted by **Friday, January 3, 2025, by 5:00 PM EDT**.
4. A Task Force will be assigned to monitor each selected project.
5. **The products of all funded research projects become the property of ELECTRI International. All copyrights and royalties resulting from the final products of the funded proposal will become the exclusive property of the Foundation.**
6. The following limitations will apply to the budget:
 - a. Fringe benefit costs require proper documentation.
 - b. Automobile travel is to be calculated at the prevailing Federal rate for 2024.
 - c. A maximum of 10% may be charged for an indirect cost rate with proper documentation.
This may be achieved by requesting a shared cost arrangement with a research entity.
6. A Research Agreement is available for reference by contacting the ELECTRI International office.

PROPOSED PAYMENT SCHEDULE

The schedule for payment of the negotiated project budget will be as follows: 25% after the first phase of the project; 25% upon completion of the second phase of the project, as determined by the parties; 25% upon completion of the third phase of the project, as determined by the parties; and 25% upon acceptance of the final report/product by ELECTRI International. The payment schedule may be modified by mutual agreement. **IF THE ORIGINAL PROPOSAL WORK PLAN CHANGES AT ANY POINT, ELECTRI RESERVES THE RIGHT TO ADJUST THE RESEARCH BUDGET.**

PROPOSAL REVIEW PROCESS

The ELECTRI Council is responsible for approval of project funding. Each researcher selected to submit a final proposal will be paired with a Task Force leader who will be responsible for presenting the proposal to the ELECTRI Council during its January meeting. Researchers do not attend ELECTRI Council Meetings. Each final proposal will be reviewed by the ELECTRI Council. In addition to providing the final proposal, researchers will be required to produce a three-minute video summarizing the research proposal. This video will be shared with the ELECTRI Council along with the full proposal.

Proposals not selected for funding by the Foundation will not be returned to the applicant and may be considered for ELECTRI funding later. Proposals of interest to the Foundation may be subject to revision and negotiation. Final acceptance of project results will be based on review and acceptance by the Task Force and ELECTRI International staff. A contract detailing the scope of the work and the negotiated budget will be executed prior to the start of the project.

MONITORING FORMAT

All projects selected for funding will be monitored monthly by a Task Force composed of members of the ELECTRI Council, technical experts according to project scope, and a Foundation executive staff member.

ELECTRI CONTACT INFORMATION

Josh Bone
Executive Director, ELECTRI International
1201 Pennsylvania Ave. NW 20004
Washington, DC, 20004
Tel (240) 800-5008
Josh.Bone@electri.org

Amanda Harbison
Director of Research, ELECTRI International
1201 Pennsylvania Ave. NW 20004
Washington, DC, 20004
Tel (202) 991-6255
amanda@electri.org