

DEED Scholarship Requirements - Technical Design Project (TDP)

Contract Agreement: After the student receives the award notification letter and contract, the student's university advisor and the student must sign the contract and upload it to DEED's scholarship management system for DEED's signature and effective date. An executed hard copy of the Agreement will be sent to the student.

Scholarship Payments:

- The student contact may submit an invoice for the first \$1,000 upon execution of the contract agreement; the second \$2,000 will be paid when sufficient progress on the project has been made by the student(s) as determined by their university advisor. The final payment of \$2,000 will be paid upon satisfactory completion of the project and receipt of the final deliverables and two-page summary abstract.
- All invoices must include the title of the scholarship project and the name of the student.
- Students must submit a W-9 in order to be paid by APPA.
- All checks will be made payable to the student. For multiple students working on a single project payments will be evenly divided.
- **Travel Reimbursement:** The TDP scholarship includes travel reimbursement up to \$3,000 to enable students to provide a presentation on their project at APPA's Engineering & Operations Technical Conference. Expenses may include transportation, lodging, and meal expenses. Meeting registration is complementary. No alcohol or entertainment expenses will be paid. The student must submit an invoice for the expenses to be paid along with receipts after the conference.

DEED Mentorship:

- A DEED member utility mentor will be assigned to TDP scholarship recipients. Mentors are intended to be a resource to the students and to provide them with information on career opportunities in public power and the utility industry. If possible, the student will do one of the following during the course of their scholarship:
 - shadow an employee on staff at a DEED member utility.
 - learn about the electric utility industry and careers in public power by attending a tour and/or briefing at a DEED member utility.
 - attend and/or participate in a special event their mentor utility hosts such as programs during Public Power Week or at local schools.
- The utility mentor should have periodic contact with the student during the scholarship and be kept informed of the status of the project. Mentors are often able to provide useful input and practical knowledge related to the TDP project thereby improving the final result.

Reporting and Deliverables:

- Students are required to complete the DEED technical design project based on the proposed start and completion dates noted on the application form. If the project falls behind and the completion date will not be met, notify the DEED administrator immediately.
- Any significant changes in the scope of the project should be reported to the DEED administrator immediately.
- The student must submit a brief summary when the project is 50 percent complete. The summary abstract instructions on page 2 may be used for this report.
- The student must complete a satisfactory summary abstract once their project is complete. Instructions are on page 2.
- The student must complete a satisfactory final report once their project is complete. Instructions are on page 3-4.
- Final reports, abstracts and any other deliverable promised in the project application must be reviewed and approved by the utility before being sent to the DEED administrator.
- All reporting for the DEED scholarship (mid-point report, abstract, final report) must be submitted through DEED's scholarship management system, the same platform where the application was submitted. Use this link <http://tinyurl.com/APPASchol>, log in, and upload required documents.

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Student Career Assistance from DEED:

- In order to assist students in considering career opportunities in public power APPA developed the website www.careersinpublicpower.com. Use this resource to gain information about opportunities to work in the electric utility industry. It contains helpful information regarding energy related jobs in public power.
- Students may also take advantage of APPA's Career's website at <http://careers.publicpower.org>, to post a resume or view job openings at public power utilities across the country.

Summary Abstract Instructions:

All DEED scholarship recipients are required to complete a Summary Abstract for their projects. These will be posted to the online DEED project database. The purpose of the abstract is to inform staff at other public power utilities about your experiences and the project's results. We more often learn from our mistakes than our successes, so be honest about the outcome of the project.

An electronic version of the abstract is required. This may be submitted through the DEED scholarship management system, the same platform where your application was submitted. Log in at <http://tinyurl.com/APPASchol> to upload your abstract. Please provide complete information for each section, however keep in mind that the document length should not exceed two pages. The information required for the abstract includes:

Project Title • The official project title, as submitted in the original proposal to the DEED board of directors.

Dates Begun and Ended • The project term as submitted in the original proposal to the DEED board of directors, or as subsequently adjusted and agreed to by the DEED administrator.

Date Scholarship Awarded • The month and year the DEED board awarded the scholarship.

Purpose of Project • A two or three sentence summary of why the project was undertaken.

Utility Name and Address • Name and address of sponsoring utility. Include other participants under additional notes.

Educational Institution Name and Address • Name and address of sponsoring college or university.

Student Name/Supervisory Personnel • Include information on all people participating in the project.

Project Subject Areas • These topics/key-words will help DEED members locate your project using the DEED Project Database. Include as many subjects as you think appropriate. Examples include: air quality, batteries, cable, demand-side management, environment, HVAC, load forecasting, performance management, reliability, safety, SCADA, turbines, and voltage control.

Problem Statement • Explain the problem the project is attempting to solve.

Project Description • Describe the project including methodology and how you expected the project to solve the problem stated above.

Summary of Results • Explain the outcome of the project, whether you feel you were successful and whether the results will contribute to a solution.

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Final Report Instructions:

According to Section J of the DEED Policy Manual (revised November 28, 2012), TDP recipients are required to submit, within three months of project completion, a “detailed final report on their work, describing activities, costs, bibliography, achievements, problems, results, and recommendations.” The final \$1,500 payment will be released once the report is approved by the DEED Administrator.

An electronic version of the final report is required. Log in to DEED’s scholarship management system, the same platform where the scholarship application was submitted at <http://tinyurl.com/APPASchol>, to upload your final report.

The information required for the final report is described below. A satisfactory final report should include a complete history of the project/internship – background information on the utility and reasons why the project was undertaken, the problem(s) to be solved and why this particular solution was chosen over others. In writing your report, recognize that we more often learn from our mistakes than our successes, so be honest about your experiences and the outcome. Recognize that a candid analysis and description of the work undertaken is of greatest value to future researchers who can benefit from your lessons learned. Please provide thorough documentation for each section described below.

Keep in mind that the purpose of both the final report and abstract is to educate staff at other public utilities about your experiences, whether the outcome is considered successful or not. A simply written and candid report is desired and most useful to future researchers; an inaccurate, insubstantial, and needlessly wordy “glossing over” or exaggeration of what really happened is a disservice to all future researchers who would benefit from your lessons learned.

Project Title • The official project title as submitted in the original proposal to the DEED board.

General Overview • Provide an explanation of the applicability of the project to others and alternatives available (if known), problems that arose during the course of the project and how they were resolved, a discussion of whether the intended goals were achieved (and if not, why not), and recommendations regarding any new technology/technique tested during the course of the project.

Purpose • Thoroughly describe why the project was undertaken. Explain the problem the project was intended to solve.

Utility Name and Address • Name and address of mentoring utility (include other participants under “Additional Notes”).

Mentoring Utility Description • Include mentoring utility’s size (i.e., number of customers per class), annual load per class, services offered (i.e., electric, water, etc.), generation resources, and other relevant information.

Key Personnel & Phone Numbers • List personnel from mentoring utility as well as others who worked on the project. Describe any contributions during the project.

Description • Thoroughly describe the scope of the project.

Diagram • Not all projects lend themselves to use of a diagram, but many do. The diagram can be a flow-chart, schematic, drawing, graph, or other pictorial that will add to readers’ understanding of the project. Include the diagrams in the final report and if possible also include them separately as an EPS or TIFF file.

Dates • Describe the project’s term as submitted in the original DEED proposal, and if applicable, as subsequently adjusted and agreed upon by the DEED administrator. Also provide information on the events that caused each change in the project’s term.

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Alternatives • Thoroughly describe all known alternatives to the project. To the extent known, for each alternative, include information on the scope of research needed for the project alternative, costs, etc. Include an explanation on why the chosen path was taken.

Results to Date • Thoroughly describe what has occurred on the project up to the time of completion. Include all relevant data resulting from the project.

Status • The status of the project when the DEED scholarship was concluded.

Applicability • Thoroughly explain how others might use the results of the project. In particular, explain if there are public power systems (those of a particular size, with particular generation type, with high distribution losses, etc.) that might find the results especially useful.

Future Plans • If applicable, provide information about continued or tangential work planned, whether to be conducted by you or another party. If none is planned, discuss, why not.

Equipment • List equipment, if any, purchased and/or used for this project. For each piece of equipment where applicable, include information on its efficiency, and why it was chosen over another brand/size/model, and how it performed.

Budget • Develop funding and cost sections. Under funding on an annual basis, list all organizations that contributed funds to the project (both monetary and in-kind). Under the “Costs” section, provide annual information about what was spent on the project for hardware, labor, etc.

It is important to break down the budget as much as possible so others can see the itemized costs. You may include a budgeted and actual figure for each item under costs. The totals for funding and costs should be the same. If the figures are different, please explain why. A complete budget should show all sources of funding and compare funding totals with each actual versus budgeted costs for each piece of equipment, consultant fees, utility staff time, etc.

Additional Notes • Include additional information about the project that is important to know, but does not fit into any of the previous categories.

References • Include a list of publications consulted for the project and any publications or papers resulting from the project. A bibliography, if available, should be attached.

Contact DEED program staff, at DEED@PublicPower.org or 202-467-2942 with any questions related to completing DEED scholarship requirements.