



Region 3 Projects Funding Requests

Allen Jones

A “Thank You” to the Projects Committee Members

- ▶ Damith Wickramanayake
- ▶ Melody Richardson

- ▶ Their willingness to review the proposals and provide valuable feedback is greatly appreciated.

Projects Committee Charter

- ▶ The Region 3 Projects Committee is tasked with encouraging **collaboration** and **engagement** among our members and the public by assisting with funding for projects that foster IEEE's goal of "**Advancing Technology for Humanity.**"
- ▶ In June 2022, the Region 3 ExCom approved a proposal to fund projects that address some aspect of Climate Change.



How the Funding Works

These rules were taken directly from those used for the Pandemic Projects with minor changes for project topics, due dates, email addresses, etc.

Project Topics

What kinds of projects could we do?

Any project that can be associated with Climate Change. Some examples:

- ▶ Projects to Measure the effects of Climate Change.
- ▶ Projects to Avoid Climate Change.
- ▶ Projects to Adapt to Climate Change.
- ▶ Projects to Remediate Climate Change.

These are just some examples. Sections were encouraged to use their members, Chapters, Affinity Groups, Student Branches, and local businesses to create their own projects. They just needed to tie it back to the Climate Change in some way.

Team Members

- ▶ Each team needed to consist of at least 3 IEEE members of a Section and if possible, should include local Chapters, Affinity Groups, Student Branches and local businesses.
- ▶ The application needed to specify at least three IEEE team members from the Section and their IEEE member numbers. Others could be added to the team after the project began.
- ▶ Each Section could only apply for 1 grant. Sections were welcome to do multiple projects and could work together with other Sections... but each Section could submit an application and funding would be given to a Section only once for an approved application.



To Apply

The application needed to be a PDF of 5 pages or less with the following sections:

- Team Name
- Section Name
- Contact person
- Project description
- Who was participating in the project (names and IEEE member numbers)?
- Expected outcome
- Expected costs (Region 3 would cover up to \$1000)

Applications and an endorsement by the Section Chair (if not the contact) needed to be submitted to Allen Jones, allen.jones@ieee.org.



Review

- ▶ Each application would be reviewed by a review board. If approved, the funds would be transferred to the Section NextGen banking account.
- ▶ The projects would be reviewed based on compliance with these guidelines.
- ▶ Each Section was eligible for funding of a single project independent of submissions by other Sections.

Reporting

- ▶ Each Section project team was requested to send a monthly status update.
- ▶ This update should include progress on the approved project and how the funds were being spent.
- ▶ A summary of this information would be posted on a Region web site to track and publicize all projects.
- ▶ Submission of pictures was encouraged but needed to comply with IEEE requirements and restrictions and have an IEEE Photo Release.

Timetable

- ▶ Applications needed to be submitted by October 15, 2022.
- ▶ If all funding had not been exhausted at that point, then a second round of funding that removed the 1 project per Section and \$1000 per project constraints would be offered. The deadline for those applications would be December 15, 2022.
- ▶ Funds would be released in 2022.
- ▶ The projects needed to be completed by November 30, 2023.

June 2022 ExCom Meeting Motion

The R3 ExCom approved the following motion from the SSC:

- ▶ “Move that up to \$10k of 2022 Initiatives Budget be used to support the Region 3 Project initiative as described. Region 3 will fund accepted proposals through grants transferred to the group’s Section NextGen Banking Account upon acceptance by the Project Review Committee and the Region 3 Director’s concurrence. Funded groups are expected to produce monthly reports and participate in publicity efforts.”

Where Do We Stand on Funding Requests?

Funding Requests

The Projects Committee received requests for funding from three groups:

- ▶ Jamaica Section – “The Application of Wireless Sensor Network in Monitoring Climate Change: A Case Study of Developing Country, Jamaica”
- ▶ Orlando Section – Valencia Team (Valencia College) – “Project Addressing Climate Change: Solar Powered Ventilation with Controlled Airflow for Parked Cars”
- ▶ Region 3 WIE – “Leveraging Technology to Fight Climate Change Essay Competition”

Jamaica Section

“The Application of Wireless Sensor Network in Monitoring Climate Change: A Case Study of Developing Country, Jamaica”

- ▶ Several members of the Jamaica Section originally proposed to set up a project using wireless sensors to study Climate Change.
- ▶ We had to send the original proposal back for revision for several reasons:
 - It was unclear what data was being collected because the budget request was very vague as to what kind of sensors would be purchased with the grant money or even what they were trying to measure.
 - In the one case where a specific sensor was called out, the sensor was a temperature/humidity sensor that was designed for indoor use only. It did not have a temperature/humidity measurement or operating range that would be needed for measuring outdoor weather conditions.
 - Since it was unclear what was being measured or how the measurements would be used, we could not determine whether the same data was not already readily available from the Meteorological Service of Jamaica.
 - The funding request was missing the endorsement from the Section Chair and the acknowledgement that the Section would accept the responsibility for the financial management of the project.



Jamaica Section

“The Application of Wireless Sensor Network in Monitoring Climate Change: A Case Study of Developing Country, Jamaica”

- ▶ A second version of the funding request was submitted that revised the parts list. The requested funding amount was \$1020.00.
- ▶ We had to send this version back for a couple of reasons:
 - The original indoor-only wireless sensor was changed to a sensor with a temperature/humidity measurement and operating range that was suitable for outdoor use, but the new sensor was a hardwired RS485 Modbus sensor. There was no explanation of how this hardwired sensor was going to be used in a wireless sensor network that now contained no wireless sensors.
 - The revised application still did not specify what data would be collected, although we can infer that it is temperature/humidity data, or how this project would provide any data that was not already readily available from the Meteorological Service of Jamaica.

Jamaica Section

“The Application of Wireless Sensor Network in Monitoring Climate Change: A Case Study of Developing Country, Jamaica”

- ▶ We sent the application back a third time and asked once again that they answer these specific questions.
- ▶ We received an addendum to their application that contained the following:
 - “This project is expected to measure various temperatures and humidity of the environments thereby detecting or monitoring climate changes. We shall subject our testing to different measured ambient temperatures and the results of each test will be obtained from the SPD-HT485-B [the new hardwired sensor] display screen for analysis.

“We are not sure the methods used by Meteorologists of Jamaica, to monitor climate change. Whether they are using geo-phones, hydrophones and or satellite, our work will be independent of theirs because our objective is to develop a proto-type.”
- ▶ Since it is still unclear what Climate Change problem they are trying to address or how they propose to address it, the Projects Committee cannot recommend this project for approval at this time.
- ▶ The revised request for funding can be found at <https://iee-collabratec.ieee.org/app/workspaces/8415/document/861931> and the addendum can be found at <https://iee-collabratec.ieee.org/app/workspaces/8415/document/861932>.



Orlando Section – Valencia Team (Valencia College)

Project Addressing Climate Change: Solar Powered Ventilation with Controlled Airflow for Parked Cars

- ▶ The Valencia Team proposed a project that would monitor the interior temperature of a parked car and automatically vent the car if the temperature rose too much.
- ▶ They had a several tie-ins with Climate Change.
 - They cited the risks of heat stroke if people or pets remain in a parked car on a hot, sunny day. This problem gets more severe as the ambient temperature increases because of something like Climate Change.
 - They pointed out that if the temperature of the car rises too much, the driver then runs the air conditioning in the car at full or initially drives with the windows open to cool the car. Both increase fuel consumption and waste energy. Again, the frequency of this happening will increase as ambient temperatures rise due to Climate Change.
 - They cited the damage that can occur to automobile interiors and electronics in a car that gets too hot. Yet again, this problem would occur more frequently as ambient temperatures rise due to Climate Change.



Orlando Section – Valencia Team (Valencia College)

Project Addressing Climate Change: Solar Powered Ventilation with Controlled Airflow for Parked Cars

- ▶ Initially, we had to send their application back for a couple of reasons:
 - As proposed, their solution had a serious risk of starting a lithium battery fire.
 - The funding request was missing the endorsement from the Section Chair and the acknowledgement that the Section would accept the responsibility for the financial management of the project.
- ▶ In addition, we pointed out a few design problems that, although not unsafe, would have kept their design from working. For example, they were going to try to drive 12 Volt, 2-wire fans directly from the outputs of a Raspberry Pi Pico H (3.3 Volts, 12 mA max outputs).



Orlando Section – Valencia Team (Valencia College)

Project Addressing Climate Change: Solar Powered Ventilation with Controlled Airflow for Parked Cars

- ▶ The Valencia Team incorporated all the feedback and submitted a new application requesting \$526.34 in funding for their project.
- ▶ The Region 3 Projects Committee reviewed the new proposal and recommends that this funding request be approved.
- ▶ The revised request for funding can be found at <https://iee-collabratec.ieee.org/app/workspaces/8415/document/861927>.



Region 3 WIE

Leveraging Technology to Fight Climate Change Essay Competition

- ▶ Region 3 WIE proposed having WIE sponsor a Region-wide essay competition for university students within Region 3 “on original innovative technologies that can be implemented to curb the climate crisis.”
- ▶ They proposed cash prizes for the 1st, 2nd, and 3rd place winners and possibly providing IEEE and WIE memberships for graduating students.
- ▶ The R3 Projects Committee consulted with Joe Pennisi, R3 Treasurer, and Mary Ellen Randall, IEEE Treasurer, to determine if providing cash prizes and free memberships were even permissible. The ruling on those questions was:
 - Providing cash prizes is permissible provided we comply with the IEEE Form 1099 requirements.
 - Providing free memberships is not permissible because using member dues to pay for other member’s dues is not allowed.
- ▶ Since using funds to provide cash prizes as opposed to project expense reimbursements was not something that had been discussed when the Climate Change project initiative was approved, we decided to leave the question of whether the funds *should* be used for this purpose to the Region Director and the ExCom.



Region 3 WIE

Leveraging Technology to Fight Climate Change Essay Competition

- ▶ Also, since the WIE proposal was an activity that would happen at the Region level instead of the Section level, Joe Pennisi was consulted to determine if it made more sense to handle reimbursements through the Region rather than through one or more Sections.
- ▶ Joe was willing to handle the reimbursements provided it was acceptable to Director Brunasso. At that point Director Brunasso was consulted to see how she wanted to handle this.

Region 3 WIE

Leveraging Technology to Fight Climate Change Essay Competition

- ▶ Director Brunasso responded
 - “My intent with the projects was that Sections would come up with a project that would help quantify or reduce climate change. An essay contest for the Region does not meet either of those goals, so I don't think it qualifies.”
- ▶ WIE was then contacted and informed that we could not fund this effort through the Projects Committee for the reason indicated above.
- ▶ The revised request for funding can be found at <https://iee-collabratec.ieee.org/app/workspaces/8415/document/861929>.



What happens next?



More Applications Might Arrive this Year

- ▶ Florida Tech (Melbourne Section) has indicated that they intend to file an application by the final deadline of December 15, 2022.
- ▶ The University of West Florida Student Branch (Northwest Florida Section)
 - UWF applied for Professional Development funding for a Solar Panel Workshop.
 - That request was rejected because Professional Development funding is for activities that are non-technical in nature.
 - Director Brunasso suggested that this could be funded under the Climate Change Project initiative.
 - The UWF Student Branch has been provided with a copy of the rules that apply for Climate Change projects and have been made aware of the upcoming submission deadline.
 - They have indicated that they intend to apply for funding by the December 15, 2022 deadline.
- ▶ Both applications need to be evaluated and approved or rejected by December 22, 2022 to make sure that the transfer of funds occurs in the 2022 budget year.

Looking Ahead to 2023



Plans for Another Round of Funding in 2023

- ▶ The Region 3 Projects Committee plans to submit another motion for funding to the ExCom through the SSC as early in 2023 as possible.
- ▶ We intend to continue with the Climate Change theme.
- ▶ The new proposed round of funding will incorporate any applicable changes that the SOSC is currently proposing that get adopted by the ExCom along with any “Lessons Learned” from this round of funding.