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| Project title | *\*At your discretion. Demand Response Pilot Project…?* |
| Group Name | *\*At your discretion. This will be permanent!* |
| LPI | *\*Your information* |
| IT/A Contact info | \*Leave this blank |
| Project Details – Abstract | Our project focuses on Demand Response in the residential sector, addressing the limitations of renewable power as electricity suppliers. While solar and wind are vital sources for cleaner energy, their inability to respond quickly to fluctuating demand is a significant drawback. Industrial and commercial users have been more engaged in demand response initiatives, leaving residential users largely unincluded and unaware of their status. Plus, utility companies often withhold critical usage data. To bridge this gap, we are developing a user-friendly system that allows households to utilize simply a webcam to read and monitor their electricity usage. By empowering residential users with access to their own data, we aim to facilitate our participation in demand response activities, ultimately reducing the reliance on thermal power plants and promoting a cleaner environment.  As part of our project, we will employ a computer vision model to recognize the information displayed on electric meters. This model will require training with several hundred images, necessitating the use of GPUs for efficient processing. Therefore, we request to use the SCC On Demand so as to ensure that we can effectively develop and refine our model to accurately interpret the data captured by users. |
|  | \****Note: The items in this section below are only required for projects requesting over 30,000 SUs of resources for the coming year but we would appreciate all Lead Project Investigators filling them out with what information you have available.***  *Since we only will use less than 100 SU, this part is not necessary for us to fill in.* |
|  | For this project, we can request 10 GB of backed up spaces and 200 GB of not backed up spaces. This is very sufficient. |
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