**PROJECT PLAN DOCUMENT**

**(Due: 31st January)**

*Note: this is a “living document”, meaning its content will change with the implementation of the project*

| Project number | ***46*** |
| --- | --- |
| Project Title | ***Virtual Power Plant*** |
| Document | Project Plan |
| Creation date | ***02-02-2025*** |
| Created By | ***Aditya R Shankar*** |
| Client | ***Manish Tiwari, CERO Smart Mobility*** |

# **Brief problem statement**

Create a tool that utilizes the open adr 3.0 protocol and automatically manages distributed energy resources (DERs) controlling their injection of power and/or reduction of load by receiving commands and configurations from control centers, processing and sending commands to software which can manage the DER locally.

# **Team Members**

Eshwar – Documentation, CSMS Integration  
Aditya – Software Design, express api  
Shlok – VEN Code   
Monosij – VTN Integration (accept commands from api)  
Hiten – VEN Code

# **Team Communication**

No fixed time for meetings. Our meet depends on client meet. Must meet 3 days before client meet, or worst case 2 days before client meet.

# **Development Environment**

Vscode (for express api, and possibly add plugins and use for rust VEN, VTN as well)  
RustRover Jetbrains IDE – Possibly a better IDE for rust, plan to test it at least.  
Microsoft Office tools for documentation

# **Milestone Schedule**

| **Milestone** | **Due Date** | **Release** | **Deliverable?** |
| --- | --- | --- | --- |
| *Create draft requirements* | 7/02/25 | R1 | No |
| *Finalize requirements* | 14/2/25 | R1 | Yes |
| *Software Structure Design* | 17/2/25 | R1 | Yes |
| *Software Structure Redesigned (inputs from client)* | 21/2/25 | R1 | Yes |
| *Load commands done* | 27/2/25 | R1 | No |
| *VTN Express Integration (VEN key, send load commands)* | 312/25 | R1 | No |
| *CSM Integration Express (energy reports)* | 10/3/25 | R1 | No |
| *Demand Response* | 14/3/25 | R1 | No |
| *Register Stations, Transactions, Load commands, full integration with CSM,Express.* | 21/3/25 | R1 | No |
| *Testing and bug fixing* | 27/3/25 | R1 | No |
| *Initial Release* | 31/3/25 | R1 | Yes |
| *Release 2* | 14/3/25 | R2 | Yes |