Technical Strength of the Applicant

GNA Energy Private Limited ("**GNA**"), i.e., the Applicant has preferred an application before the Central Electricity Regulatory Commission ("**Ld. CERC**") in terms of CERC (Power Market) Regulation, 2021 and Guidelines for Registration and Filing Application for Establishing and Operating Over the Counter (OTC) Platform 2022 to establish a state of the art Over The Counter ("**OTC**") Platform, enabling demand and supply side electricity market stakeholders to make informed decisions through exchange of information in the most simple, secure, transparent and expeditious manner amongst the extensive network of buyers and sellers in the country.

GNA aims to act as a pivot for all participants in the energy sector landscape of the country, acting as a data repository of sellers and buyers. The platform is going to help empower stakeholders to address their electricity optimization requirements, in making informed, impactful and holistic decisions, further helping sustainable development of the country.

Further, this data will help the users in their efficient planning and forecasting processes. The proposed OTC Platform will provide historical data related to buyers and sellers and provide advanced data analysis, predictive modelling, insights, trends analysis to all market participants in a modus operandi that is fair, user-friendly and non-discriminatory. It will also provide any data/ information as required by the Ld. CERC.

GNA shall adhere to objective, fair and transparent criteria for operating the OTC Platform as per Ld. CERC and Govt. of India Regulations. Prior to onboarding of the market participants, proper due diligence would be conducted and such information shall form part of the data repository, which shall be available, as and when required by the Appropriate Authority. For the purpose of identification, the platform would utilise a unique identifier like Legal Entity Identifier (LEI) or Permanent Account Number (PAN). The Platform will also maintain neutrality without influencing the decision making of the participants in any manner.

GNA's proposed OTC platform will provide a superior user-interface, along with data input flexibility, as per their requirements. Customization and clean user interface will help in effective visibility of the desired needs of the stakeholders.

Utmost priority shall also be given to the privacy of the users, that would be ensured through state-of-art cyber security and cyber resilience framework to manage risks to systems, networks and databases.

The OTC Platform proposed to be established and operated by GNA will provide for a:

- Robust and responsive, technologically driven, cloud-based, electronic platform comprising of both potential buyer and seller of electricity and act as a secure and safe platform for exchange of information.
- Repository of data related to buyers and sellers
- Advanced data analytical tools for the stakeholders
- Exchange of information on a real time basis or near real-time basis
- Cyber security and cyber resilience framework to manage system, networks and databases risks along with comprehensive risk management framework
- Mechanism, to address any dispute that may arise

The following is just a brief strategy that GNA would be undertaking:

- Design Phase: Designing of the technical architecture along with User-Interface ("**UI**") and User-Experience interface ("**UX**"), that forms the core of the software process. An ergonomically designed UI/UX would provide for a seamless onboarding process, capturing the right type of data sets. GNA will fine tune the software modelling along with onboarding processes. During this phase, the security and cyber experts would be proactively involved to continually monitor and test the reliability and robustness of the platform architecture. The Applicant's technically qualified team would deep dive into the architectural and safety processes and will design the robust and reliable application.

  The Applicant's proposed OTC Platform shall put in place a comprehensive risk management framework with the help of risk and cyber experts. Risk assessment and mitigation would be a critical focus point and would be closely monitored right from the architectural stage. All the risks associated with its operations shall be identified properly and managed prudently. Risk assessment would be part of organisational structure and a dedicated committee would be observing this aspect of the platform. Access to the platform would be controlled and unauthorised access would be prevented. The Platform will fulfil all the requisite legal and regulatory requirements.

- Development phase of protocols: The Applicant will design and develop the OTC Platform using the latest technological infrastructure, keeping in mind the safety protocol as per Government of India guidelines and global best practices. Development would be done in tandem with the cyber security team to safeguard the platform from any possible vulnerabilities/ security breach.

  Once developed, the OTC Platform shall provide information of potential buyers and sellers of electricity. It will maintain a repository of data related to buyers and sellers and provide such historical data to market participants. The Platform will provide services such as advanced analysis tools to market participants.

- Accessibility: Once developed, the OTC Platform shall be available as a mobile application (Mobile App) and web-application. Availability at both platforms shall make it more inclusive and more participative. The proposed mobile application can be downloaded from the mobile app stores. Market Participants can access any of the platform applications. Easy access along with an ergonomically designed registration form will help the participants to register themselves, without any technical help. With the presence of navigation tabs and tools, participants can explore the platform with ease and utilise the platform effectively and efficiently. Various services offered by the platform will be listed in a clean layout and participants can choose the services as per their convenience and needs.

  Platform would be using continuous risk assessment and monitoring tools along with utilisation of artificial intelligence and machine learning language to observe the participants' behaviour and problems faced. Artificial intelligence and machine learning will help in the ever-evolving nature of the platform and they will detect the obstacles faced by participants and will work towards smoothing the processes and removing the redundancy in the processes.

  It would use a range of security methods like Data encryption, decryption, hashing etc of high standards to protect the data as per PMR 2021 regulations. It will bring data anonymity and prevent leakage and theft of data. Platform will automatically raise alarm and create log reports in the event of disruption of activities or market abuse and the same would be intimated to the commission without any delay. It will implement systems and controls to ensure that participants participate with fairness and integrity and monitor the activities on a real time basis as well as post-facto basis.

The Platform would also have grievance redressal mechanisms and dedicated resources for its resolution. A dedicated customer support will be established for immediate response and early and faster redressal of participants' issues. Escalation matrix would be well defined in the organisational structure. Mechanism would be well defined on the platform and part of the communications with the participants.

The Platform would be hosted on reliable and well reputed service providers and data backups shall be maintained in encrypted format and other system reliability protocols would be taken into account.

- Data Analytics tools: During this process queries will be developed to analyse the data received by OTC platform and further their graphical representation layouts will be designed.

The Platform shall make available historical data related to buyers and sellers and provide such services as advanced data analysis, to all market participants in a fair and non-discriminatory basis. It would provide any data or information as required by the commission in the format as desired by them. Customised reports shall be created by the platform as per requirements. Data logs of activities and various disruption activities will also be maintained by the platform and provided to commission and various charts would be created for better understanding.

GNA possesses the understanding and wherewithal, to not just meet the basic requirements but the actual vision and objective for developing an OTC platform, that provides for a transparent and robust infrastructure for participants, leading to not just increased cost competitiveness but also bringing renewable energy to the mainstream. The same would be made possible with an advanced, secure, scalable, interactive technological platform for its participants, across the nation.