



Energy Saving Solution Lease Model ESCO

ATOMA/ESCO/RFP# A25001

Date: March 01, 2025

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Executive Summary

This ESCO (Energy Service Company) Request for Proposal (RFP) represents a pivotal step in ATOMA's commitment to sustainability and environmental responsibility. The initiative seeks to transition approximately 400 telecom sites to renewable solar energy, a move that reflects the company's dedication to reducing its carbon footprint and embracing cleaner, more sustainable energy sources. This project is not just a response to the growing global urgency to combat climate change; it is also a strategic business decision aimed at enhancing operational efficiency and long-term cost-effectiveness and to reduce dependency on Diesel, its international price fluctuations.

ATOMA, as one of the leading companies in the telecommunications sector, recognizes the critical role that renewable energy plays in modern business operations. By transitioning to solar energy, the company is set to significantly lower its reliance on traditional power sources, which are often less reliable and more environmentally detrimental. This shift is expected to grant considerable operational benefits, including reduced energy expenses and enhanced reliability of power supply, crucial for uninterrupted telecom services.

Furthermore, this initiative aligns ATOMA with international sustainability goals and positions the company as a frontrunner in the adoption of green technologies in the telecom sector. By proactively addressing the challenges of climate change and resource conservation, ATOMA is setting a precedent for responsible corporate practices in the region.

The scope of this project encompasses a comprehensive overhaul of the current energy infrastructure across numerous sites, each with its unique energy requirements and challenges. The successful implementation of this project demands a partner with not only technical expertise in solar energy solutions but also a deep understanding of the operational demands of telecom sites.

This Executive Summary provides an outline of the project's ambitions, underscoring the significance of transitioning to solar energy and the expected positive impact on ATOMA's operational efficiency, cost structure, and, importantly, its environmental footprint. Through this RFP, ATOMA invites proposals from experienced and innovative vendors who share its vision for a sustainable future and possess the capability to turn this vision into reality.

Introduction and Background

ATOMA, as one of the leading players in the telecommunications sector, confronts the ongoing challenge of powering its extensive network of telecom sites with energy sources that are both reliable and sustainable. As the company continues to expand its operations, the need for an efficient and eco-friendly energy solution has become increasingly critical.

Currently, ATOMA's network largely depends on a mix of power sources, including diesel generators (Gensets) and the national commercial grid (DABS/Breshna). While these sources have provided the

necessary power until now, they come with significant drawbacks. Reliance on diesel generators, for example, results in high operational costs due to fuel expenses and maintenance requirements. Additionally, the environmental impact of using fossil fuel-based energy sources cannot be overstated, contributing to increased carbon emissions and ecological degradation.

The commercial grid, while a more traditional source of power, also presents its challenges, primarily in terms of reliability and environmental sustainability. Grid power in many regions can be unpredictable, leading to service disruptions that are untenable in the critical telecommunications industry. Moreover, the electricity supplied through the grid is often generated from non-renewable sources, aligning poorly with the global shift towards environmental sustainability.

Recognizing these challenges, ATOMA is embarking on a transformative journey towards renewable energy, with a focus on solar power solutions. The motivation for this shift is multi-faceted, encompassing not only the desire to reduce the company's environmental footprint but also to achieve greater operational efficiency and cost-effectiveness. By transitioning to solar energy, ATOMA aims to harness a clean, inexhaustible power source that can provide consistent and reliable energy to its sites across various geographies.

This section of the RFP delves into ATOMA's current energy landscape, the limitations of existing power sources, and the strategic imperatives driving the move towards solar energy. It sets the context for understanding the importance of this project, both from an operational standpoint and in terms of the company's commitment to environmental stewardship and sustainable development goals.

Project Goals and Objectives

1. Achieve Significant Site Energy Cost Reductions through Clean Energy

Solar power offers a sustainable alternative to diesel, helping ATOMA (ATOMA) transition its network into a low-carbon, future-ready energy model. This change is projected to deliver immediate financial relief through decreased monthly energy costs, reduced diesel purchases, and lower maintenance needs, especially at remote sites where logistics are costly. These objective targets both quick wins and compound long-term savings, making clean energy a financially compelling solution.

2. Implement a Flexible, Low-Risk Energy-as-a-Service Model to Scale Clean Energy Use

To accelerate the adoption of clean energy, ATOMA will pursue an energy-as-a-service model where the provider owns, operates, and maintains the infrastructure. This ensures professional management and optimal system performance, resulting in more consistent environmental benefits. Financially, this model allows ATOMA to avoid upfront investment, reduce financial risk, and shift energy costs into predictable monthly payments. It supports immediate energy transition without the burden of capital infrastructure spending.

3. Ensure Consistent, Reliable Power Supply to Reduce Downtime and Emissions

One of ATOMA's top environmental goals is to reduce the overuse of diesel generators, which are inefficient and environmentally harmful when running continuously. Solar systems, especially with

battery storage, offer cleaner and more stable energy, cutting generator runtime and emissions at every site. Greater reliability also means fewer service disruptions, improved network uptime, and lower costs tied to emergency fuel deliveries or generator repairs. Power stability protects revenue while lowering the environmental and financial costs of downtime.

4. Deliver Immediate Operational Efficiencies while Reducing Environmental Waste

By reducing dependence on diesel logistics and minimizing generator failures, ATOMA will create leaner and cleaner operations. The project aims to eliminate inefficient fuel handling, leakage risks, and waste oil disposal, common problems in diesel-reliant setups.

5. Stabilize Long-Term Energy Costs While Avoiding Future Environmental Penalties

Clean energy provides protection from future environmental regulations, such as carbon taxes or emissions-based penalties. As these risks grow, solar energy offers a sustainable hedge against regulatory uncertainty. The fixed-pricing structure of solar power agreements also delivers financial benefits. ATOMA seeks to lock in stable, long-term pricing that shields the company from fossil fuel volatility, supporting both environmental resilience and financial predictability.

6. Substantially Reduce Environmental Impact and Carbon Emissions

ATOMA seeks to dramatically lower its environmental footprint by replacing diesel generators with solar and hybrid energy solutions. This move is expected to reduce carbon emissions, air pollution, and noise pollution, especially in rural and community-based sites. It aligns with national and global climate goals and strengthens ATOMA's position as a corporate leader in climate responsibility. At the same time, replacing diesel with clean energy is expected to cut operating costs by reducing fuel consumption, generator maintenance, and logistics. Many sites are expected to realize OPEX savings, making this shift a financially smart move as well as an environmentally necessary one.

7. Reinforce ATOMA's Leadership in Sustainable and Responsible Telecom Operations

Through this project, ATOMA seeks to set a benchmark for sustainability in Afghanistan's telecom sector. By adopting clean energy, ATOMA strengthens its brand as a forward-thinking, responsible operator, appealing to environmentally conscious stakeholders and positioning itself for ESG-focused partnerships and funding opportunities. Simultaneously, this strategy supports bottom-line growth by modernizing site operations and enabling access to potential tax benefits and reduced regulatory costs in the long term.

8. Partner with a Technically and Environmentally Aligned Energy Provider

ATOMA is looking for vendors that share their sustainability vision and have the technical capabilities to deliver reliable clean energy solutions on scale. The right partner will ensure ATOMA's sites operate with low emissions and high efficiency, supporting the company's carbon reduction goals. This partner should also be financially savvy, offering models that reduce ATOMA's risk while delivering shared value through performance-based cost savings and sustainability gains.

9. Transition to Renewable Energy

Implement solar energy solutions across 400 ATOMA telecom sites, transitioning from traditional power sources to a cleaner, renewable energy source. A combination of multiple technologies, such as wind turbines and hybrid solar systems, is open for consideration.

10. Achieve Operational Efficiency

Enhance the reliability and consistency of power supply to telecom sites, reducing downtime and improving service quality.

11. Compliance with Regulations and Standards

Ensure alignment with govt. regulations and standards related to energy consumption and environmental protection.

12. Foster Corporate Responsibility

Demonstrate ATOMA's commitment to corporate social responsibility by investing in sustainable and eco-friendly energy solutions.

Through this RFP, ATOMA seeks partners with vendors who not only have technical expertise in solar energy solutions but also shares its vision of sustainability and continuous innovation. The ideal partner will understand the nuances of the energy-as-a-service model and possess the capability to implement it effectively across diverse telecom site configurations on a long-Term win-win basis.

Scope of Work

The vendors selected through this RFP process will be entrusted with a comprehensive range of responsibilities to ensure the successful implementation of solar energy solutions in 400 ATOMA's telecom sites. The scope of work includes, but is not limited to, the following key activities:

1. Site Surveys and Energy Load Evaluation:

Perform detailed site surveys to assess the current energy infrastructure and requirements. Evaluate energy consumption patterns and identify optimal locations for solar panel installation, considering the unique characteristics of each site.

2. Land Acquisition or Leasing:

- a. Service providers can use land already leased by ATOMA for energy solution installations, the vendors have the option to use this land, provided that, at the end of contract, the vendors will take care of removing everything and return the land to previous status.
- b. The vendors are responsible for securing (Additional in case needed) land suitable for installing Energy solution. This may involve negotiating lease agreements by the vendors and without reflecting any additional cost on the monthly rate/invoice.

3. Design and Installation of Energy Systems:

Customize the design of Energy saving Systems for each site, considering open Technology and future proof solution depend on site location and conditions, includes but not limited to procurement and installation of all necessary equipment, solar panels, wind Turbine, inverters, batteries, Diesel Generator, and DC Generator, etc. The vendors should provide ATOMA sites through the energy systems both AC and DC Outputs.

4. Comprehensive Maintenance and SLAs:

Manage all aspects of maintenance (preventive and corrective) under strict service level agreements. The SLAs will define maintenance schedules, response times, and performance standards, along with compensation for non-compliance.

5. Regulatory Compliance and Safety Standards:

Ensure all installations and operations comply with relevant local safety standards and environmental regulations. This includes obtaining necessary permits and conducting regular safety audits.

6. Performance Monitoring and Reporting:

Establish a system for continuous monitoring of Energy System performance. Provide regular reports detailing energy production, system efficiency, and maintenance activities.

7. Project Management and Coordination:

Oversee the entire project, including coordination with ATOMA's teams, management of subcontractors, and adherence to the agreed timeline and budget.

The vendors must exhibit a proven ability to manage similar scale projects and deliver a turnkey solution that aligns with ATOMA's specific needs and sustainability goals. The success of this project is integral to ATOMA's commitment to operational efficiency and environmental sustainability.

8. Project delivery

The vendors selected should be ready to provide an aggressive plan to deliver all relevant equipment and accessories to Afghanistan including customs clearance in 10 weeks.

After the custom clearance, the solution to be deployed and go live to service sites within 3 months (30% 1st month, 30% 2nd month, 40% 3rd month).

Technical Specifications

The technical specifications for the Energy Systems under the EaaS model should ensure optimal performance, compliance with safety standards, and alignment with ATOMA's sustainability goals. While the service provider will own and maintain the Energy equipment, the following specifications are essential to guarantee that the system meets ATOMA's needs:

1. System Performance and Efficiency:

Energy Systems should demonstrate high efficiency and performance. With High Specs and Durability panels and Rectifiers models, the system should achieve a minimum efficiency standard, aligning with industry standards for commercial solar installations.

2. Reliability and Energy Availability:

The system must ensure a high level of reliability and energy availability, capable of 24/7 operation. However, the system Design should be based on supplying for at least 48 hours of Energy Supply Backup time upon any technical or non-technical failure.

3. Compliance with Safety and Quality Standards:

a. Compliance with international safety standards such as IEC 61215 and IEC 61730 is required to ensure the quality and safety of the solar installations.

b. The system must adhere to all local regulations, compliance and environmental rules.

4. Scalability and Technological Adaptability:

The design should allow for scalability and flexibility to accommodate future expansion or technological advancements in solar energy, could be expanded from one category to another reaching 20 and 25 KW in the coming 2 years.

5. System Integration and Compatibility:

a. **Integration with Existing Infrastructure:** Energy Systems must seamlessly integrate with the existing electrical and network infrastructure at ATOMA's telecom sites. This includes compatibility with existing power distribution systems and any network monitoring equipment.

b. **Monitoring and Control Systems:** The systems should include advanced remote monitoring and control capabilities. This technology will enable real-time tracking and management of energy production and consumption, facilitating efficient energy use and proactive maintenance. The ATOMA team will have a view on the monitoring system while the vendors are responsible for its deployment and supervision.

c. **Maintenance:** The vendors are responsible to ensure preventive and corrective maintenance of the entire energy system/site (DG, Solar panels, Inverters, Batteries, consumables Etc.) including solar panels cleaning, adjustment, tightening, verification and standardization of thresholds... and share the monthly report with ATOMA.

It is recommended that the vendors have an automatic cleaning system for solar panels.

6. Safety and Protection:

a. **Electrical Safety:** All components of Energy Systems must adhere to stringent electrical safety standards. This includes proper grounding, surge protection, and the use of durable, safe materials to minimize the risk of electrical hazards. If existing ground pit is expired or its value is not within acceptable range of less than 1 Ohms, a new ground pit shall be created.

b. Weather and Environmental Protection: Given the diverse environmental conditions of telecom sites, the equipment must be robust and capable of withstanding extreme temperatures, humidity, and dust. The design should account for local environmental conditions to ensure long-term durability and performance.

7. Environmental Impact and Sustainability:

The system should align with ATOMA's sustainability objectives, minimizing environmental impact and supporting the company's commitment to reducing its carbon footprint.

8. Service Level Agreements (SLAs):

The vendors should provide clear response to the SLAs mentioned in the coming sections and covering system maintenance (preventive and corrective), response times, and performance metrics. This includes outlining the responsibilities for system upkeep and detailing any compensation for SLA non-compliance.

9. Vendors Expertise and Experience:

The vendors must demonstrate expertise in delivering Energy and Solar solutions.

In summary, while the specific technical details of the solar panels and related components may be at the discretion of the service provider, ATOMA requires that the overall system meets high standards of efficiency, reliability, safety, and sustainability. Proposals should clearly outline how these standards will be met while adhering to the EaaS operational model.

Service Level Agreements (SLAs)

The Service Level Agreements (SLAs) outlined in this section define the standards for service quality and system performance that the solar energy service provider must adhere to. These agreements cover response times to issues, system availability targets, and regularity of preventive maintenance reporting. The SLAs are structured to ensure that the Energy Systems are maintained at a high level of efficiency and reliability, crucial for ATOMA's telecom operations. Compensation for non-compliance is described to enforce these standards and ensure accountability from the service provider. A cap on total compensation is included to maintain fairness in the agreement.

1. System Availability SLA:

This SLA focuses on maintaining a high system uptime, crucial for the uninterrupted operation of telecom services. It specifies availability targets and the compensation for failing to meet them.

Site Category	Description	Availability Target	Compensation for Non-Compliance per site per Month.
All Sites Categories	Sites connecting >= 5 sites	100%	20% deduction of the monthly cost of the site in case availability reduced to 99.5%

			30% deduction of the monthly cost of the site in case availability reduced between 99.49% and 99.0% 40% deduction of the monthly cost of the site in case availability reduced between 99% and 98%. 50% deduction of the monthly cost of the site in case availability reduced to below 98%.
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2. Response Times SLA:

This SLA ensures timely response to any power-related issues at ATOMA's telecom sites. The goal is to minimize downtime and maintain operational continuity.

Site Category	Response Time	Resolution time	Compensation for Delay
All Sites categories	15 min	2 hours	10% of monthly Invoice for specific sites in case resolved by more than 2 Hrs.

3. Preventive Maintenance Reports SLA:

Regular preventive maintenance is key to ensuring the long-term efficiency and reliability of the Energy Systems. This SLA mandates monthly maintenance reporting.

The contractor is solely responsible to Apply all required Preventive and corrective actions (sharing list of actions with ATOMA) without any extra cost to the monthly invoice.

Report	Compensation for Non-Compliance
Monthly reports required	5% deduction of monthly fee for each missed/incomplete report 5% deduction of Monthly fee for each missed/incomplete site preventive Maintenance. 5% deduction of Monthly fee for each site Dust not cleaned on time.

4. Escalation Matrix Requirement:

As part of the SLA, the vendors are required to provide a comprehensive escalation matrix. This matrix should outline the specific steps and contact points for escalating and resolving issues, ensuring swift and effective action in case of any problems or service disruptions. The matrix must include contact details for different levels of management and technical support and define the circumstances under which each level should be contacted. The inclusion of a well-defined escalation matrix is crucial for maintaining clear lines of communication and ensuring prompt resolution of issues, thereby upholding the high standards of service and reliability expected by ATOMA.

Contract Duration

The contract duration will be 5 years.

Service Providers Responsibilities

- a. The service provider (ESCO) is fully responsible for the dimensioning and engineering of the power systems to meet ATOMA site requirements.
- b. The service provider (ESCO) is fully responsible for engineering of the site as (not limited to) civil, electrical, surveys, designs, supplying materials, installation, commissioning & testing, integrations, operation, maintenance transportation, customs clearance and others related activities and coordination with ATOMA operation and energy team.
- c. The service provider (ESCO) undertakes all types of civil work pertaining to power equipment that includes site survey, design, soil test, necessary approval, foundation works, earthing/grounding (surge Arrestor).
- d. The service provider (ESCO) supplies AC/DC Power to ATOMA Active Telecom equipment.
- e. The service provider (ESCO) is responsible for installing all its systems without impacting site availability - power and network outages are not allowed.
- f. The system provided by supplier should be IP66 (IP66 Enclosure - IP rated as "dust tight" and protected against heavy seas or powerful jets of water.
- g. System should have Inside DC cooling/heating control system (dimension depend on number of Batteries sets)
- h. The service provider (ESCO) is responsible for the dimension of its maintenance teams to meet agreed SLA.
- i. The service providers (ESCO) should have 24/7 by 365 team available remotely and contacts to be provided to central NOC and accessible through emails.
- j. The service providers (ESCO) all activities on sites to be coordinated with ATOMA operations and energy team.
- k. The service providers (ESCO) are responsible for maintaining all power-related hardware to meet agreed SLA (performance levels).
- l. The service providers (ESCO) are responsible for replacing any faulty power systems as per agreed SLA.
- m. The service providers (ESCO) are responsible for replacing any lost/stolen equipment from the site to meet agreed SLA.
- n. The service providers (ESCO) are responsible for site security and site watchman and his Salary will be under Service Providers payroll and responsibility.
- o. The service provider (ESCO) is responsible for fuel supply to maintain the site operational, as well as the prevention of fuel pilferage.
- p. The Service provider is responsible to control and prevent any power connection unrelated to ATOMA equipment.
- q. The service provider (ESCO) guarantees that they will replace faulty and/or end of life or end of service power hardware with new ones and not used ones without any additional cost to ATOMA.

- r. The service provider (ESCO) confirms that they will respect Afghanistan government health, safety and environmental norms and regulations.
- s. The service provider will grant access to ATOMA, and test sites randomly visit to check the batteries are in healthy condition and the backup time is as per contractual specs.
- t. The service provider is not allowed to subcontract full or partial part of this agreement.
- u. The service provider (ESCO) should meet MTTR request per site category.
- v. The service provider (ESCO) should send report upon request incident and performance report.
- w. The service provider (ESCO) should agree to compensation for not meeting Performance levels and MTTRs.
- x. The service provider (ESCO) should comply with ATOMA security access process and procedures, including Security clearance procedures.
- y. The ESCO Company will create, manage, and report to the security department of ATOMA for all security-related matters.
- z. The ESCO Company will be fully responsible for all actions of its watchmen during duty, such as criminals and so on, ATOMA will not take any responsibility in this regard.
- aa. Ensure following the approved ATOMA Security policy & procedure for the access control of ATOMA staff and contractors to the sites.
- bb. Investigate security-related incidents while assigned from ATOMA SECURITY dept. and report as per the agreed procedure.
- cc. Maintain proper logbook & registration procedure on the ATOMA sites.
- dd. Service providers are responsible for granting access to CCTV installed on sites to ATOMA security team.
- ee. The service provider is responsible for providing proof of title and/or ownership of the equipment.
- ff. The service provider (ESCO) Should consider additional solar power capacity for cloudy period as per area.
- gg. The service provider (ESCO) should consider an additional margin of solar capacity on actual consumption for possible future expansions during the contract period.
- hh. The service provider (ESCO) should Provide enough spare parts pool per region for fast replace of faulty parts.
- ii. The service provider (ESCO) should Expand capacity when requested within one-month maximum and if any extra space needed for that expansion, it will be service provider responsibility.
- jj. The service provider (ESCO) should provide all installation materials for sites, either electrical, mechanical or civil.
- kk. The service provider (ESCO) should provide Technical Training covering all engineering Knowledge, management tool and any topic recommended.
- ll. Service providers to appoint a dedicated project manager who will be visiting ATOMA timely basis

General Terms and conditions:

Supplier is responsible to Supply, ship, import, pay customs, install, integrate, Operate, Monitor and maintain the Energy Solution and keep replacing Batteries, Panels, inverters etc., to keep best performance and stability of the system.

- a. Renew Option after 5 years with Different Tariff.
- b. Mention Target of monthly fee amount per site category
- c. A rack mounted fire extinguisher system needs to be included in the cabinet.
- d. The service provider (ESCO) must provide both AC and DC power for ATOMA Base Station equipment
- e. The service provider (ESCO) must guarantee standby AC/DC power for ATOMA related HW, test equipment and/or ad hoc construction equipment.
- f. The provision of the AC/DC supply from a service provider (ESCO) must be dimensioned to provide a service level 100% power availability to ATOMA sites.
- g. The service provider (ESCO) must have emergency/adhoc generators in all regions in case of failure of any active generator in the site.
- h. The service provider (ESCO) should have a smart (AI) power management system that decides what is the most reliable source of energy.
- i. The service provider must be capable of meeting ATOMA's sites' power requirements.
- j. The service provider (ESCO) must provide all the relevant capacity dimensioning/calculation notes of complete their energy system, technical assumptions, all relevant products technical data sheets and as well as the civil work design considering wind speed of 160Km/h and the snow load.
- k. The service provider (ESCO) should come with an innovative way to resolve the space issue for solar panels in the sites.
- l. ATOMA has the right to extend the contract after 5 years subject to renegotiation and mutual agreement.
- m. ATOMA has the right to buy a part- or complete solution after 5 years of the contract on the NBV calculated based on ATOMA depreciation policy, vendors have no right to decline the request.
- n. If the contract is not extended or not agreed for lease to own model after 5 years, then service providers must remove their energy system and bring back the area to previous status.

Contractual Safeguards

- **Termination for Insolvency:** ATOMA should have the right to immediately terminate the contract if the service provider files for bankruptcy, enters liquidation, or is otherwise deemed insolvent.
 - **Step in Rights:** Allow ATOMA to assume control of operations or subcontract to any of the existence service providers in the event of default or insolvency.
1. **Business Continuity Planning**
 - **Backup Option:** each of the service providers should be kept as a backup plan for each other, Each of the service providers should have the capacity and be financially strong who can be engaged on short notice.
 2. **Monitoring and Risk Assessment**

- **Financial Health Checks:** ATOMA will Periodically assess the providers financial status through financial reports, or audits.

Model

- a. The service provider (ESCO) proposal is pure energy as a service (EaaS).
- b. Power setup as designed and implemented by ESCO Supplier.
- c. Renewable energy systems will be the main power source and Generator/Grid AC power will be the second source as backup for unexpected outages.

ATOMA Technical Requirements

- a. Rectifier alarms should be integrated/ synchronized with ATOMA NOC
- b. The service provider (ESCO) Outdoor DC Power System Cabinet shall house the following:
 1. Rectifier/inverter System
 2. DC distribution
 3. Remote Monitoring System to ensure SLA compliance
 4. Lithium-ion/or better technology batteries or as per vendors' design.
 5. Rest of solar equipment i.e. solar module...etc.
 6. Positive bus-bar
 7. Power Inverter Smoke detector and high temperature
 8. Protection such as: Surge arrestor and any other required protection components.
 9. Necessary cooling and ventilation equipment to maintain the best operational conditions for batteries and electricals components, considering external weather conditions varies from -25 to 50C (degree Celsius).
 10. Cabinet door open alarm should be included

- c. Inverter Specifications:

The following specified type of inverter shall be selected to provide both AC and DC outputs and must include a generator controller with dry contact capability for ON and OFF functions for generator.

Huawei Embedded Power, ETP23036, Three-Phase, Top inlet and outlet, Width 19-inch, Height 6U(ETP23036-C6A1)

Or

Any other inverter or any other Vendor with similar specs as the above-mentioned Huawei inverter possesses.

Alarms and Settings:

- a. The following settings should apply to the DC solution and should be forwarded to the ATOMA (Tenant) per event via e-mail and phone calls
 1. Battery low voltage alarm (BLVD) = Typically 0.5v higher than LLVD disconnect voltage, then alarm message should be (Battery low volt)
 2. Low voltage disconnects (LLVD) = To be determined by Supplier based on battery technology deployed (46.9 V), the alarm should be (DC-Low voltage disconnect)
 3. Rectifier hardware module failure or fault, the alarm message should be (Rectifiers fault)
 4. Rectifier AC off, alarm message should be (Mains fault, this should be only when the generator is running according to order from solar controller and AC Volt is ok but No AC supplying the rectifier)
 5. Solar power Module is faulty, the alarm message should be (Solar power module fault)
 6. Solar Circuit breaker is off, the alarm message should be (Solar Breaker is off)
 7. Solar Controller fault, the alarm message should be (Solar controller fault)
 8. Other alarms recommended by vendors
 9. Surge Protection Failure, the alarm should be (Surge failure)
- b. The following settings will apply to the outdoor cabinet solution and will be forwarded to the ATOMA (Tenant) per event via e-mail, SMS and phone calls
 1. Cabinet door open, the alarm message should be (Solar cabinet door open)
 2. Cabinet high temperature, the alarm message should be (Solar cabinet high temperature)
 3. smoke, the alarm should be (power cabinet Smoke)
 4. General alarms like Availability, Power consumption, Temperature, smoke, fire alarm, and intrusion alarm.
 5. Other alarms as recommended by vendors.
- c. All events and system alarms will be monitored in separate and consolidate log files with date and time stamps for troubleshooting purposes. Specific alarms that will be monitored are:
 1. Remote Management System (RMS) system offline alarm
 2. Generator AC power failure alarm

3. AC & DC kWh meter communication failure alarms
4. Urgent system alarms require immediate attention.
5. Non-urgent system alarms require attention.
6. Intrusion alarms
7. Rectifier hardware failure alarms
8. Hardware failure alarms
9. High temperature alarms (Equipment and battery compartment)
10. DC System Circuit Breaker failure alarms (MCB)
11. Smock alarm
12. Surge Protection Failure alarms (Over Voltage Protection - OVP)
13. Low battery voltage alarms
14. General battery alarms

Grade of Service – Performance and compensation levels

The service provider (ESCO) should be responsible for supplying power with specific performance levels described in the following table. In case the levels are not met, then compensation will be applied. ATOMA sites are segmented based on severity / priority categories.

Performance Level

1. Performance and service levels will be defined based on-site categories and priorities.
2. ATOMA will be responsible for determining site priority definitions and the number of sites per category.
 - **Priority one:** Technically critical sites, such as backbone, hubs, and high-revenue sites.
3. Performance levels to be measured on DC power availability
4. Performance levels to be monitored per site through Management system or ATOMA monitor center or ATOMA Network maintenance reports, in case of mismatch between the service provider & ATOMA report then ATOMA report should be the reference.
5. Any reports requested should be sent to ATOMA by the deadline.
6. If any report is delayed without justified reason, then compensation will be applied.
7. Example: Availability of 99.8% can be reduced to downtime figures in minutes of:
 - a. 2.88 minutes of downtime per day, or
 - b. 20.16 minutes of downtime per week, or
 - c. 86.4 minutes of downtime per month
8. The table 1 below shows the Performance Levels per site categories

Compensation for performance level:

1. All compensation amounts to be calculated monthly.
2. DC Availability should be calculated on site per site basis and not on cluster basis.
3. Site DC power availability – source of truth should be the reports from Management System or ATOMA monitor center or ATOMA Network maintenance reports, in case of mismatch between the service provider & ATOMA report then ATOMA report should be the reference.

Responsibilities of ATOMA

- a. Tenant to provisioning access to the cabinet during the installation phase
- b. Tenant to conduct the agreed acceptance test procedure
- c. Except for the willful acts or omissions of the Tenant's personnel, the Tenant shall not be liable for any loss or damage during the Service Period to the generator, DC Power System and all related AC & DC accessories
- d. provide approval and sign-off for installation and commencement

Responsibility Matrix

<i>Description</i>	<i>Tenant</i>	<i>Vendors</i>
<i>Sign off SOW</i>	X	X
<i>Signing of a DC Power TLA for the duration of the Service Period</i>	X	
<i>Implementation</i>	<i>Assist</i>	X
<i>Alarm testing</i>	X	X
<i>Basic Training</i>		X
<i>Commissioning and acceptance testing</i>	X	X
<i>DC Power System Maintenance</i>		X
<i>Backup Generator</i>	<i>Assist</i>	X
<i>Site Visit</i>	<i>Assist</i>	X
<i>Service Performance Evaluation</i>	X	X
<i>Site Optimization</i>	<i>Assist</i>	X
<i>Service Completion Review and acceptance</i>	X	X
<i>Decommission and removal of Outdoor DC Power System Equipment and transfer it to ATOMA Warehouse at Kabul</i>	<i>Assist</i>	X
<i>Payment of monthly fixed fee of each site.</i>	X	

- a. the responsibility matrix w.r.t. the build responsibilities:

<i>Description</i>	<i>Tenant</i>	<i>Vendors</i>
<i>Vendors Power System Supply and Installation</i>		X
<i>Vendors Battery Bank Supply and Installation</i>		X
<i>Vendors ACDB Supply and Installation</i>		X

Vendors DCDB Supply and Installation		X
Tenant DCDB Supply and Installation	Assist	X
Tenant AC Rectifier Supply and Installation		X
Tenant DC Cable Supply and Installation to DCDB		X
Vendors AC Meter Supply and Installation		X
Vendors DC Meter Supply and Installation		X
Vendors Static Switch Supply and Installation		X
Vendors DC-DC 54-57v Converter Supply and Installation		X
Vendors AC Supply and Installation		X

Evaluation Criteria:

1. Technical compliance and maintenance plan
2. Commercial Compliance
3. Legal Compliance
4. Financial Compliance, Company Historical profile, Experience and qualifications
5. Delivery Time plan
6. References and past performance

Instructions to submit proposal:

- National qualified and eligible suppliers who meet the requirement of this RFP are requested to drop their proposal along with the required supporting documents in a sealed and stamped pocket in the tendering box located in the reception unit, at the ATOMA office located in the (Park plaza, opposite to park shahr-e- now), and the proposal submission form should be filled and signed by suppliers representative who submit the proposal.
- International qualified suppliers who are holding valid registration license form relevant entity of the Afghanistan government, must have partnership with a local company are requested to send the scan copy of their proposal along with the required supporting documents in the password protected folder (the folder password will be requested later) to the attention of Sadeequllah Ahmadzai: Sr. Supply chain Directo.
- (E-mail address: (sadeequllah@ATOMA.COM.AF) CC. aman.zafar@atoma.com.af)
- Along with the documents requested in selection criteria, respected suppliers must include the following information:
 - Provide at least three references from reputable organizations to which the supplier has provided similar services. The proposer company should provide the contact names and numbers of the at least Three reference companies. The Email Address should be an official Domain.
 - Financial stability: Please provide a Bank Statement for the last year to show ongoing project and transaction. The Bank Statement should be in the name of the Company and must be signed by an authorized Bank.

- Provide List of Company's working capital.
- Provide Company Annual Audit financial statements for the last three years.
- Proof of tax clearance and declaration form for the previous year.
- Contact person in the case of any technical queries and clarification are:
Name: Ahmad Takal, email address: atakal@atoma.com.af phone#: +93772221943
Name: Saifullah Saber: ssabir@atoma.com.af phone#: +93772222089
- Proposal submission deadline is CoB May 20, 2025, Kabul time.
- Potential international and national suppliers are kindly requested to submit their proposal before the proposal submission deadline, no proposal will be considered if submitted after the submission deadline May 20, 2025 CoB Kabul time.

ACKNOWLEDGEMENT/ PRELIMINARY NON-DISCLOSURE AGREEMENT

- ATOMA Afghanistan reserves the right to accept or reject any or all bids and to annul the bidding process at any time, without thereby incurring any liability to the affected supplier(s) or any obligations to inform the affected supplier(s) on the grounds of ATOMA Afghanistan's action.
- We agree that all information and documents contained in or related to this RFP as provided by ATOMA Afghanistan is proprietary information and shall be treated as confidential.
- We undertake that all such information and documents, as described above, shall not be divulged to any other party (such prohibition applies to any further release of information regarding this RFP by ATOMA Afghanistan) without the prior written permission from ATOMA Afghanistan to do so.
- We agree that this RFP and all information and documents relating to it and provided hereunder by ATOMA Afghanistan are not to be used for any purpose other than for the preparation of our tender submission. This undertaking will also apply to any subsequent contract resulting from this RFP.

Commercial Terms and Conditions:

1. The service provider (ESCO) buys back ATOMA existing generators and fuel tanks and uses them as second source
- OR
2. The service provider (ESCO) should dismantle ATOMA old unneeded power equipment such as generators, Fuel Tank, batteries and all related accessories.
 3. Suppliers to provide 2% discount year-on-year effective from the 2nd year of the contract.
 4. Monthly Payment will be done in local currency on monthly basis after deduction of compensation if applicable.
 5. Supplier to provide prices in the following two categories,
 - ATOMA Site Monthly Fee
 - ATOMA+1 Monthly Fee