

NFE checkin - 12/09/2026

Agenda

- PAC2026 Africa - Can Mr Arinda join the NFE team attending this?
- Nansana Pilot updates
 - Solar
 - Meter 007 health
- New customers
 - Commercial customer model -
 - Pearl Marina -
 - Kimbowa's Household
- Updates on Q3 development mile stones

Below is a cleaned-up summary of the **NFE weekly meeting held on 12 September 2026**, focusing on decisions, progress, risks, and concrete follow-ups rather than reproducing the full discussion.

NFE Weekly Meeting — 12 September 2026

Participants: Aaron Tushabe, Dansturn Kimbowa, Hillary Arinda

Duration: ~95 minutes

1. Power Africa / Nairobi planning

The team confirmed that the Power Africa organizers will cover the conference fees, resolving one of the main outstanding travel issues.

Travel planning is now focused on finalizing attendance, accommodation and flights. Aaron indicated that he may need to fly depending on travel restrictions and timing. Hillary was asked to confirm whether she can participate for at least part of the trip, potentially from around **20-26 September**. Dansturn's schedule is constrained by a crusade beginning around 17 September.

Aaron also plans to schedule time with **Ben** before the conference for a short preparation session so the team can better understand what to expect and how to make the most of the event.

Direction: Proceed with registrations and hotel arrangements now; delay booking any uncertain flights until individual attendance is confirmed.

2. Nansana pilot — problematic Meter 007

Meter **007** continues to lose connectivity unpredictably.

The team previously identified a configuration issue which, once corrected on-site, temporarily brought the meter back online. However, the problem returned without a clear triggering event.

Because configuration changes require physical interaction with the meter and the meter's own controls are unreliable, the team agreed it is no longer worth repeatedly troubleshooting it in production.

Decision: Replace Meter 007 at the site with Aaron's known-working test meter and bring the problematic unit back for bench/lab investigation.

For the current billing period, the team can capture the meter's opening/closing readings manually so the customer's bill remains accurate even if the telemetry data is incomplete.

3. Customer communication — email vs WhatsApp

The team revisited how NFE should communicate with customers as the pilot grows.

At present, WhatsApp is convenient, but the team sees several drawbacks:

- harder to automate reliably;
- business API costs;
- restrictions on initiating customer conversations;
- dependence on Meta's policies and APIs;
- difficulty preserving and analyzing support history;
- reduced scalability once customer numbers grow.

Aaron proposed gradually shifting formal customer communication toward **email**, especially for:

- billing;
- outage notifications;
- customer support;
- PDF bills;
- issue tracking.

NFE already has a support email address and a support application, which could make email easier to automate and manage.

Hillary noted that WhatsApp is deeply embedded in everyday business communication in markets such as India and may remain important for customer convenience.

Working position: Do not necessarily abandon WhatsApp, but build email as the durable system of record. Ideally, customer notifications could eventually go to **both WhatsApp and email**, while support operations are centrally tracked.

4. Financing / Stanbic loan process

There was little progress on the Stanbic financing application during the week.

The main blockers remain:

- getting NFE's accounting books fully in order;
- preparing for an audit;
- working through the bank's detailed application/due-diligence requirements.

Aaron acknowledged that this process may take longer than initially expected and could delay the Nansana solar expansion if NFE waits for the loan.

However, the team **did not change its earlier position** that going through the bank process is strategically useful.

Both Hillary and Dansturn supported continuing with the financing application so NFE can learn the process, even if it takes time.

Decision: Continue pursuing Stanbic financing, but do not necessarily make the current Nansana solar expansion dependent on the loan.

5. Possible commercial / industrial microgrid model

A major new discussion focused on whether NFE's model could be extended to **commercial or industrial customers**.

The proposed model is:

A business already pays a predictable utility bill, perhaps **UGX 4-5 million/month**. NFE installs solar, storage and controls that materially reduce the underlying grid cost while offering improved reliability.

Rather than selling cheap electricity as the sole value proposition, NFE could potentially allow the customer to continue paying something near its historic energy spend while redirecting the cost savings toward financing the new system.

That predictable historical bill could also become evidence for a bank or other financier that the customer already has sufficient recurring cash flow to support the asset.

This resembles, in some respects, the model used by companies such as the previously discussed lease/energy-service providers, but NFE would aim to build it on much lower equipment and financing costs.

A potential initial candidate discussed was a commercial property with monthly electricity expenditure around **UGX 4-5 million**.

Next step: Build the economics first and test whether the model produces sufficiently attractive margins before presenting it externally.

The team agreed that this should remain an adjacent opportunity rather than distracting NFE from its core residential/community microgrid strategy.

6. Industrial hardware considerations

Hillary raised an important consideration from her observations of larger commercial/industrial installations: at higher power levels, customers and EPCs may expect more established "industrial-grade" equipment brands such as **SMA or BYD**, rather than the smaller-scale equipment NFE currently uses.

That does not necessarily invalidate the model, but equipment requirements and customer expectations may materially change the economics.

Aaron noted that discussions with bank-approved EPCs showed that several major equipment brands are available locally.

Implication: Any industrial/commercial economics model should include a realistic hardware scenario rather than simply scaling up NFE's current residential BOM.

7. Candidate commercial site — analyze electricity consumption

The team reviewed existing electricity bills for one prospective commercial customer.

Consumption appears substantial enough to justify deeper investigation, with some periods and tariff categories significantly higher than others.

The immediate analytical goal is to understand:

- monthly consumption;
- peak vs off-peak use;
- shoulder-period use;
- load profile;
- realistic solar offset;
- battery requirement;
- likely savings;
- feasible financing structure.

Decision: Aaron will develop the economics and bring the model back to the team before approaching the customer or a financier.

8. Pearl Marina

There was **no meaningful progress this week** on obtaining the Pearl Marina building drawings needed to develop the engineering proposal.

The earlier action remains outstanding: obtain the building/as-built electrical and roof drawings so Dansturn can begin developing the proposed microgrid integration.

This remains an important follow-up rather than a changed decision.

9. Raspberry Pi / gateway connectivity problem

The team spent time troubleshooting one of the Raspberry Pi gateways that had previously connected successfully but had since gone offline.

The Pi appears powered, but is not reconnecting to the configured Wi-Fi network.

The likely problem is network connectivity rather than the application itself.

The proposed recovery process is:

1. obtain an Ethernet cable;
2. move the Pi near the router;
3. connect it by Ethernet;
4. restore remote access;
5. reconfigure/test Wi-Fi;

6. return it to its installation location once connectivity is stable.

If that fails, the SD card can be removed and the image/configuration rebuilt.

This also highlighted a broader product issue: NFE's current Raspberry Pi setup still requires too much ad-hoc field troubleshooting.

10. Move toward industrial DIN-rail gateways

The gateway troubleshooting led into a useful hardware discussion.

Aaron shared an industrial-style DIN-rail computing/gateway option that includes features such as:

- DIN-rail enclosure;
- RS485;
- Ethernet;
- cellular/SIM connectivity;
- more integrated hardware;
- fewer external adapters.

Hillary noted that once the cost of the Raspberry Pi plus enclosure, RS485 adapter, networking accessories and other peripherals is considered, the cost difference may not be very large.

The team therefore sees merit in moving toward a more integrated industrial gateway for future deployments.

Direction: Continue evaluating DIN-rail industrial gateway options, especially direct-from-China pricing for small quantities.

This could substantially improve installation quality and reliability for future NFE deployments.

11. Billing system

The team reviewed the latest monthly billing workflow.

The current system can generate bills for a defined billing period, but some steps remain manual and the user experience needs improvement.

The desired end-state is that NFE can:

1. close the monthly billing period;
2. automatically generate all customer invoices;
3. click "**send bills**";
4. distribute them automatically by email;

5. eventually also send relevant notifications through WhatsApp if appropriate.

Some current issues include:

- certain meters not reporting correctly;
- confusing workflows;
- lack of loading indicators;
- risk of duplicate clicks/submissions;
- several manual invoice steps.

The team agreed that these are mainly refinement issues rather than blockers.

12. Pilot revenue / energy use trend

The team noticed that monthly customer energy/revenue has risen from roughly **600 to 700 units**

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Several factors may be contributing:

- customer turnover;
- a new higher-consuming tenant;
- guests/holiday visitors increasing consumption;
- most importantly, installation of batteries allowing customers to continue consuming energy during grid outages.

This last point is significant because before the battery installation, outages effectively capped NFE's sellable energy.

The utility bill has also increased, however, creating a stronger incentive to begin controlling when the batteries charge and discharge.

Conclusion: NFE is now beginning to see the economic effect of improved reliability, but it also makes **battery arbitrage increasingly important**.

13. Battery arbitrage is now a priority

Because NFE charges customers using a relatively flat tariff while the upstream utility cost varies by time of use, increased consumption during expensive periods could reduce margins.

The team therefore agreed that it is time to move from merely monitoring the batteries toward actively testing **arbitrage algorithms**.

The goal is to:

- charge during cheaper periods;
- discharge during higher-cost periods;
- reduce the upstream utility bill;
- preserve the customer's flat/reliable service;
- improve NFE's margin.

Solar will improve this further, but the team agreed that arbitrage can begin before solar is installed.

Q3 roadmap status

The team believes the **core Q3 milestones have largely been achieved**.

Metering: operational, though a few problematic devices remain.

Outage detection: achieved.

Battery integration: achieved.

Billing: functioning, although still partially manual.

Customer energy data: being collected and becoming useful for operational/economic analysis.

The rest of September can therefore focus more on **stabilization, automation, UX improvements and closing outstanding bugs** rather than adding major new capability.

Action Items

Owner	Action
Aaron	Register/finalize remaining Power Africa attendees.
Hillary	Confirm Power Africa/Nairobi availability and travel dates.
Aaron	Finalize hotel arrangements and only book flights once attendance is confirmed.
Aaron	Arrange a short Power Africa preparation session with Ben before the conference.
Aaron + site technician	Visit Nansana and replace Meter 007 with the known-working test meter.

Owner	Action
Aaron	Bring Meter 007 back for controlled troubleshooting/bench testing.
Aaron	Capture manual opening/closing readings for Meter 007 so billing remains accurate.
Aaron	Continue research into moving customer support/billing notifications toward email , while preserving WhatsApp where useful.
Aaron	Assess how NFE's support tooling can centralize and retain customer communications.
Aaron	Continue the Stanbic asset-financing application and requirements process.
Aaron	Continue bringing NFE's accounting books into audit-ready condition.
Aaron	Develop the commercial/industrial microgrid economics model using the prospective customer's utility bills.
Aaron	Share the commercial model internally before presenting it to a customer, shareholder or bank.
Hillary / Dansturn / Aaron	Review suitable industrial-grade inverter/storage options and how they change project economics.
Aaron	Obtain the outstanding Pearl Marina electrical/as-built and roof drawings .
Dansturn	Begin Pearl Marina proposed integration drawings once the source drawings are available.
Dansturn	Obtain an Ethernet cable for the offline Raspberry Pi gateway.
Aaron / Hillary / Dansturn	Restore Pi connectivity over Ethernet, then reconfigure/test Wi-Fi.
Aaron / Hillary	Continue evaluating DIN-rail industrial gateway/computer options with integrated RS485/networking.
Dansturn	Check China pricing for suitable industrial gateway hardware, especially small-batch quantities.
Aaron	Improve the billing workflow toward automated invoice creation and one-click bill distribution .
Aaron / Hillary	Investigate remaining billing/meter data gaps.
Technical team	Start practical testing of battery arbitrage / peak-period discharge .

Owner	Action
Aaron	Use the rest of September to close Q3 bugs, usability gaps and automation items rather than expanding scope unnecessarily.

Highest-priority items before the next meeting

I would narrow this week's execution focus to **five things**: **(1)** replace and isolate Meter 007, **(2)** start actual battery arbitrage testing, **(3)** build the first commercial-customer economics model, **(4)** restore the offline Pi and decide whether the industrial DIN-rail gateway is the future standard, and **(5)** make concrete progress on either Pearl Marina drawings or the Stanbic financing package so those larger opportunities do not remain perpetually "next week."

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