



FAIRFAX TOWN COUNCIL MEETING STAFF REPORT

MEETING DATE	August 5, 2026
PREPARED FOR	Mayor and Town Council
PREPARED BY	Bridget Wipfler, Climate Action Coordinator
SUBJECT	Receive a Presentation on the Municipal Microgrid Project for the Town of Fairfax Facilities and Provide Direction to Staff

RECOMMENDATION

Receive a Presentation on the Municipal Microgrid Project for the Town of Fairfax Facilities and Provide Direction to Staff.

BACKGROUND

On February 13, 2026, the Town Council adopted its annual workplan. Council unanimously supported the direction for staff to investigate the feasibility of a microgrid project for Town buildings to build energy resilience, save money, and better serve the community. This staff report summarizes initial research and is intended to educate the Council and community on microgrids and how they function and how Fairfax may pursue both resiliency and savings on energy.

What is a microgrid? A microgrid is a small, local power system — such as solar panels paired with batteries — that lets a group of buildings keep running on their own electricity when the regular power grid goes down.

Currently, our Town buildings function like any other MCE/PG&E customer: drawing power from the larger utility grid and from the panels on the Pavilion (installed in 2009). Any extra solar power generated by these panels is sent back to the grid, for which the Town receives revenue (at the lower daytime rates).

A microgrid would add batteries to store solar power generated during the day for use at night, on cloudy days, or during an outage, whether from a storm, a wildfire-related shutoff, or another event. This lets Town staff keep working and the campus keep serving as a community resource exactly when residents need it most. Financially, it means the Town runs on power it already produced instead of buying expensive energy after dark. And when the grid goes down, the batteries work as a generator would, but on locally produced energy instead of gas or diesel.

State solar power rules have changed significantly since Fairfax installed solar — from Net Energy Metering 1 (NEM 1) to NEM 3. NEM 1 offered full retail credit for sending power back to the grid. This was the original financial incentive for installing solar. As the Town's 20-year NEM 1 contract expires next year, NEM 3 will significantly reduce that revenue. Instead of exporting daytime solar for a few cents, the Town stores it and uses it in the evening, avoiding retail electricity purchases (often 30–50

cents/kWh during peak hours). The savings come from avoided purchases, which is a much bigger number under NEM 3 than the export credit (under NEM 1) would be.

Several current Town projects have helped to put this research into microgrid feasibility:

- **Facilities Condition Assessment:** The Town's analysis of its buildings found that the Pavilion's roof needs to be replaced because the existing solar array is mounted on that roof, any roof replacement would require removing and reinstalling the solar system regardless of whether the Town chooses to upgrade it — making this the logical point to also replace the current panels with more efficient ones.
- **Energy Road mapping with Bay Area Regional Energy Network:** The Town developed an energy electrification plan for its buildings. Most Town buildings have been partially or fully electrified, and in April the Town received a \$100,000 grant to replace the Town Hall and Police Department's heating and cooling systems. All Town buildings currently have efficient electric water heaters.
- **Fleet Electrification Plan:** The Town received a \$100,000 grant from the Metropolitan Transportation Commission (MTC) to develop a fleet electrification plan. This project is nearing completion and will be presented to Council soon. The plan finds that storing solar power will benefit future municipal and public electric vehicle (EV) charging needs. Since the Town is committed to electrifying its fleet and adding public EV charging, building a microgrid now avoids redoing expensive electrical infrastructure twice.

In short: a microgrid is a way for the Town campus to generate, store, and use its own clean power — saving money day-to-day and keeping essential services running during outages.

DISCUSSION

Current Concept: Fairfax Town Campus Microgrid

The concept under consideration is a microgrid at the Town campus that combines solar generation and battery storage, along with supporting infrastructure, to serve Town facility loads and provide backup power during outages. The main components are as follows:

- *Roof Replacement.* The Pavilion roof will need to be replaced. This is the triggering capital need, and the logical point at which to also upgrade the solar system.
- *Solar System Analysis.* Staff recommend commissioning a solar system analysis to evaluate which Town-owned roofs are best suited for solar generation. The Pavilion roof is the most likely candidate given its existing use of solar and upcoming roof replacement, but staff want to evaluate other Town roofs as well to ensure the Town maximizes its generation potential.
- *Battery Technology.* Staff are researching non-lithium batteries that we intend to continue researching and using as the priority for this project if they are determined to be more fire safe.
- *EV Charging Connections.* The concept includes provisions for EV charging infrastructure to serve the Town's municipal fleet, with the potential to also support public EV charging.

Financial Model

The financial case for this project rests on a few key points:

- Under the new NEM 3 rules, the Town will receive less money for the extra solar power it sends back to the grid. It's more financially efficient to store that power in batteries and use it ourselves, rather than sell it to the grid for very little.
- Several third-party providers offer financing models in which the provider covers the upfront capital cost of the system. Under these models, the provider typically also maintains the system until the Town takes full ownership.
- These arrangements are structured to produce savings for the Town overtime, even after accounting for payments to the provider, because reduced utility costs offset those payments.

Funding Strategy

If Council directs, staff will pursue a two-part funding strategy:

1. **Third-Party Revenue Sharing / Financing Model.** Under this approach, a third-party provider would finance and maintain the system until the Town takes full ownership. This structure is possible because such providers are eligible for federal tax incentives and clean energy credits that are not directly available to the Town as a public agency – the provider can pass along some of that value in the form of more favorable financing terms, while the Town avoids fronting the capital cost.
2. **Supplemental Grant Funding.** Staff will pursue additional grant opportunities to fill funding gaps not covered by the third-party financing arrangement, further reducing net cost to the Town.

FISCAL IMPACT

None at present; see above for conceptual financial considerations.

ATTACHMENTS

None.