

SUPPLEMENTARY OBJECTION

Electricity-network capacity and deliverability

Application: UTT/26/1635/OP

Proposal: Land at The Broadway, Great Dunmow - up to 850 dwellings and associated development

Submitted by: Carl Rolph, Save Church End

Date: 21 August 2026

Status: Submitted by email on 21 August 2026

1. Objection

I object to the application because the applicant has not demonstrated that a correctly sized, secure and deliverable electricity supply is available for the complete development. The applicant's own evidence instead identifies a constrained and conditional connection, unresolved reinforcement, competing demand for the same network capacity and material inconsistencies in the scheme that UK Power Networks assessed.

This is an all-electric development. Electricity would be required not only for ordinary household use, but also for air-source heat pumps, electric-vehicle charging, the proposed primary school, healthcare and other local-centre uses, drainage and foul-water pumping, street lighting and the other infrastructure needed to operate the development. Electricity capacity is therefore essential infrastructure that must be shown to be deliverable before outline permission is granted.

2. The applicant requested less capacity than its own calculation

The Utility Feasibility Report calculates the following electricity demand:

Development component	Applicant's demand
850 dwellings	2,850 kVA
Primary school	200 kVA
Local centre and associated uses	600 kVA
Total	3,650 kVA

Source: applicant Utility Feasibility Report, document 4764401, page 18, Table 4-1.

Despite calculating a total demand of 3,650 kVA, the applicant applied to UK Power Networks for only 3,500 kVA. The connection request is therefore 150 kVA below the applicant's own stated total. The application does not explain the difference or provide a revised demand calculation showing that the complete development can operate within 3,500 kVA.

The combined 600 kVA allowance is not broken down between the proposed 1,400 square metre healthcare facility, 280 square metre grocery store, 250 square metre nursery, three business units and

mobility hub with eight electric-vehicle charging points. A grocery store requires continuous refrigeration and freezer capacity as well as heating, ventilation, lighting, tills, security and any food-preparation equipment. The healthcare facility would require heating and hot water, ventilation, clinical equipment, medicine refrigeration, IT and communications, lighting, security and other building services. No use-by-use maximum-demand schedule has been provided to show that all of these facilities can operate concurrently within 600 kVA.

For scale, a conventional 100-amp single-phase domestic supply has a theoretical maximum capacity of approximately 23 kVA. The 600 kVA local-centre allowance is therefore equivalent to only about 26 such domestic supplies operating at maximum capacity. That comparison does not replace a proper diversified commercial-load calculation, but it demonstrates why the unexplained allowance cannot simply be accepted. The applicant must disclose the individual loads and diversity factors used for the grocery store, healthcare facility, nursery, business units and mobility hub.

The demand calculation also does not clearly identify every operational load, including pumping installations, street and junction lighting, communal systems and any later changes to the proposed non-residential uses. The Council cannot assume that an undersized and insufficiently explained connection request will serve the complete development.

3. Most of the required capacity depends on reinforcement

The applicant's report states that only 1,000 kVA could be made available immediately, which its consultant says would serve approximately 350 homes. The remaining homes and associated development depend on UKPN reinforcement and additional network infrastructure.

- Two separate high-voltage points of connection are proposed.
- An additional 11 kV circuit breaker is required at Dunmow Primary substation.
- A new switching station is required between Beaumont Hill Pad and the tee near Godfrey Way.
- Existing high-voltage cables require replacement or overlay over lengths of 246 metres and 64 metres.

UKPN states that it would only establish through later detailed design whether Dunmow Primary has enough physical space for the additional circuit breaker. If it does not, the primary-substation boundary may have to be extended or an alternative solution pursued. The necessary land rights, consents, detailed design and final costs were not secured by the provisional offer.

4. The submitted UKPN offer does not demonstrate secured capacity

The UKPN quotation is expressly provisional and based on a high-level desktop study. More importantly, UKPN states that at least one other customer had applied for a connection to the same part of the distribution system, that insufficient capacity or other constraints prevented all requested connections from being made, and that Gladman was not first in the queue. The offer was therefore subject to conditional interactivity.

The quotation required the signed Stage 1 acceptance form to reach UKPN by 5pm on 3 December 2025. If Gladman was successful at Stage 1, full payment then had to be made within ten working days to complete

Stage 2. UKPN states that failure at either stage would automatically withdraw the quotation and require a new application.

The copy placed on the planning file contains a blank acceptance form. No evidence has been published showing that Stage 1 was achieved, that Stage 2 payment was made, that the quotation remains live, or that the requested capacity was reserved. A provisional quotation with an expired acceptance date is not evidence of a secured electricity supply.

5. Material inconsistencies remain unexplained

- The planning application seeks up to 850 dwellings, but the UKPN quotation header describes a supply for 869 houses, one local centre and one primary school. UKPN must confirm what scheme and demand it actually assessed.
- The applicant's Utility Feasibility Report says four secondary or IDNO substations would be required. UKPN's quotation makes the customer responsible for obtaining planning permission for six substations with aerials, as well as a standalone RMU/TFU switching station.
- The locations, land take, access, noise, landscape, lighting, safety and flood-risk implications of the full electricity infrastructure have not been reconciled with the outline masterplan.

6. No independent UKPN response is on the planning file

The planning file contains the applicant's five-part Utility Feasibility Report and the embedded provisional quotation, but no current scheme-specific consultation response from UK Power Networks confirming firm capacity, queue position, acceptance status, reinforcement or a deliverable energisation programme. The Council should obtain and publish that response before determining the application.

Uttlesford's Infrastructure Delivery Plan already identifies additional electricity circuits as key infrastructure for Great Dunmow's strategic growth. The present application must therefore demonstrate how its complete demand will be accommodated alongside existing and committed development. It cannot rely upon the Local Plan allocation while leaving the infrastructure needed to serve the applicant's higher 850-home proposal unresolved.

7. Evidence required before determination

1. Written UKPN confirmation that quotation 8200079141 / 3200065791 completed both Stage 1 and Stage 2 acceptance and remains live, or publication of the replacement quotation if it does not.
2. A reconciled maximum-demand calculation covering all 850 dwellings, electric heating, EV charging, the school, healthcare, nursery, shops and business units, mobility hub, sports and community facilities, pumping installations, street lighting and all other operational loads.
3. A separate maximum-demand schedule for the 600 kVA local-centre allowance, identifying the connected and diversified demand of the healthcare facility, grocery refrigeration and other equipment, nursery, business units and all eight mobility-hub EV chargers, and demonstrating that those uses can operate concurrently.
4. A clear explanation of the 3,650 kVA calculated demand against the 3,500 kVA connection request and the quotation's reference to 869 houses.

5. UKPN confirmation of existing and queued capacity, Gladman's current queue position, the two points of connection, reinforcement design, Dunmow Primary space, land rights, consents, costs and the earliest firm energisation date.
6. A corrected infrastructure plan showing the full number, type and location of substations and the switching station, with their land, access, noise, lighting, landscape and flood-risk effects assessed.
7. An enforceable phasing and occupation restriction preventing any occupation from taking place ahead of completed, tested and commissioned permanent electricity capacity for that phase, without reliance on temporary generation.

8. Requested planning response

The application should not be approved on its present evidence. The Council should require the applicant and UKPN to resolve the capacity shortfall, acceptance status, competing connection, reinforcement, substation and programme issues before determination and allow the resulting evidence to be scrutinised publicly.

If those matters are not resolved, electricity infrastructure should carry no weight as a deliverable component of the proposal and the failure to demonstrate that the development can be adequately served should add to the reasons for refusal. These are fundamental deliverability questions for an all-electric development, not minor details that can safely be postponed until after outline permission.

Please place this supplementary objection on the public planning file and ensure that it is considered alongside my principal objection and subsequent representations. I reserve the right to comment further when UKPN or the applicant supplies the missing information.

Sources

- Brookbanks, Land at Broadway, Great Dunmow - Utility Feasibility Report, document 4764401, pages 17-25.
- UK Power Networks provisional interactive quotation 8200079141 / 3200065791, dated 3 November 2025, embedded in application document 4765656, quotation pages 2-13.
- Uttlesford Infrastructure Delivery Plan, July 2024, utilities section.
- Adopted Uttlesford Local Plan: Core Policy 5 and Core Policy 10/site allocation requirements concerning infrastructure delivery and the Great Dunmow strategic allocation.
- National Planning Policy Framework: strategic infrastructure, effective plan-making and delivery requirements, including paragraphs 20 and 35-36.

Carl Rolph

Save Church End