Purpose:

Independent expert opinion on Fire Safety measures provided at Tawlaght & Srabragan, Lough Allen, Co. Roscommon

Prepared for:

Ian Boyle

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Author Name Scott Whitlock MIFireE, MIFSM, MIIRSM, TechIOSH. Tier 3 NAFRAR

Email Scott.whitlock@edp-uk.com

Website www.edp-uk.com

SIGN-OFF STATEMENT

EDP Consultants was instructed by An Bord Pleanála (An Coimisiún Pleanála) to provide expert advice on planning application consent for a battery energy storage site at Tawlaght & Srabragan, Lough Allen, Co. Roscommon, Planning authority: Roscommon County Council, 321420. All findings are based solely on the information and documentation exchanged between ABP and EDP.

Report Prepared on 28th October 2025 by TechIOSH — Scott Whitlock MIFireE, MIFSM, MIIRSM

Report Checked on 7th November 2025 by — Mark Mortimore AIFireE, MIFSM, CertIOSH

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1. PLANNING APPLICATION SUMMARY

Planning application number '2360265 Roscommon County Council' is an application for forty-two Battery Energy Storage System containers, fourteen medium-voltage power stations and all associated building, roads, and drainage works at Tawlaght & Srabragan, Lough Allen, Co. Roscommon. The reference number associated to the project is ABP-321420-24.

The proposed development site is approximately 1.6 hectares in area and is located within the boundary of the former Argina Power Generating Station, adjacent to the existing 110kV Arigna substation. The site was formerly used as a coal-fired power generation station, that operated from 1959 until 1993, after which the plant was decommissioned. The site is located just off the R280 approximately 10 kilometres south of Drumkeeran and 7 kilometres north of Drumshanbo.

The proposed development comprises the following elements: Installation of an open area Battery Energy Storage System (BESS) compound containing a series of battery containers and Medium-Voltage Power Station (MVPS) enclosures. One single storey building for the storage of ancillary control equipment and materials. New internal access roads, drainage, civil engineering works, landscaping, lighting, car parking, security fencing and all associated site work. The finished surface throughout the site is a combination of existing surface finishes and self-draining, clean stone, and stone/gravel internal access roads.

The substation will operate as an unmanned facility post construction. Welfare facilities including a toilet and wash hand basin will be provided for maintenance and inspections as required. See Figure 1.2 for the proposed site layout.

A further information request was sent by ABP's senior planning inspector assigned to the case to request further information on the proposed development. This included five requests: Method of connecting to the grid, a Fire risk management plan, and Emergency Response Plan, Fire water management plan and proposed access to fire water.

Figure 1.1 – Site aerial view - 0405-P-1000

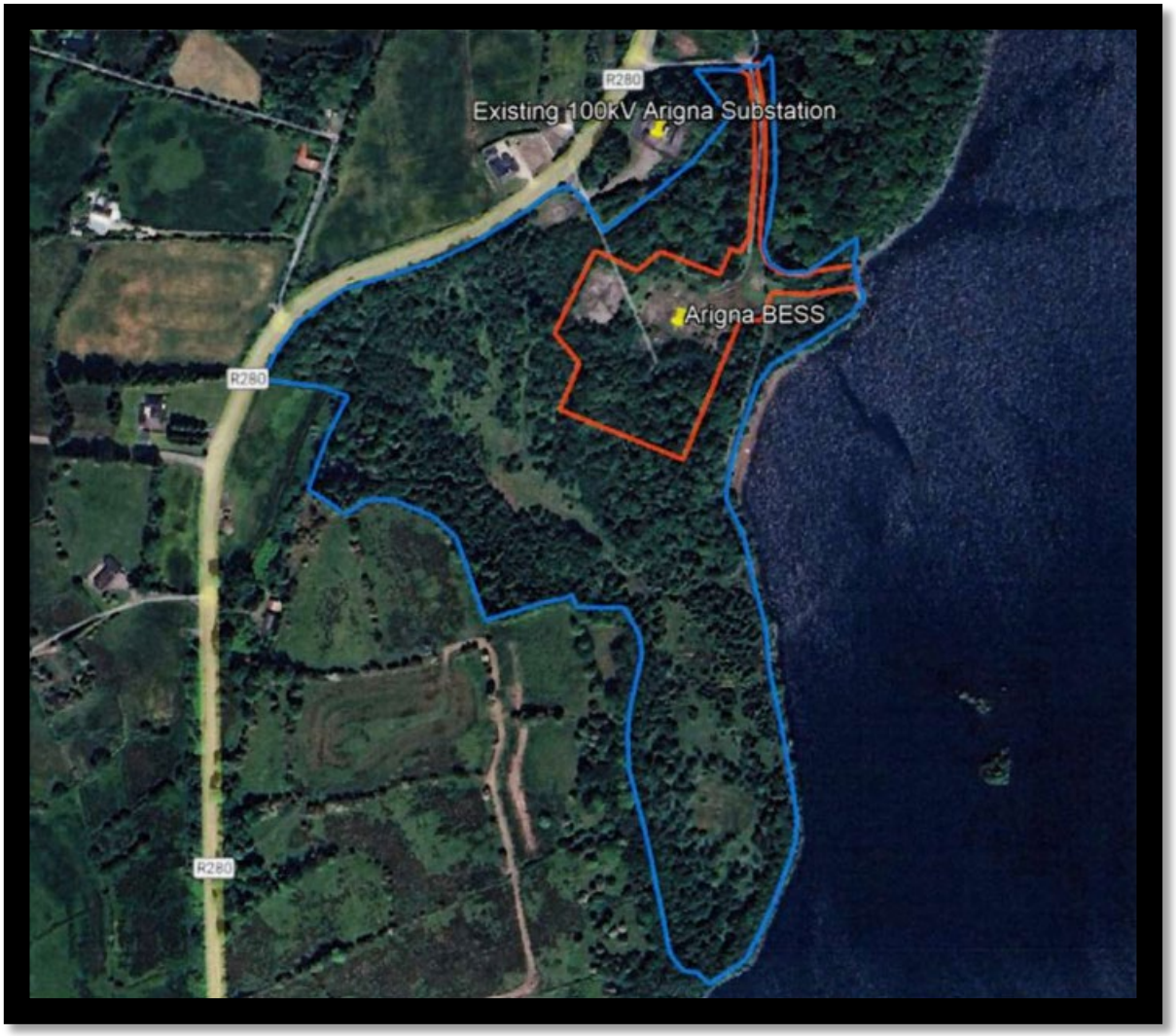
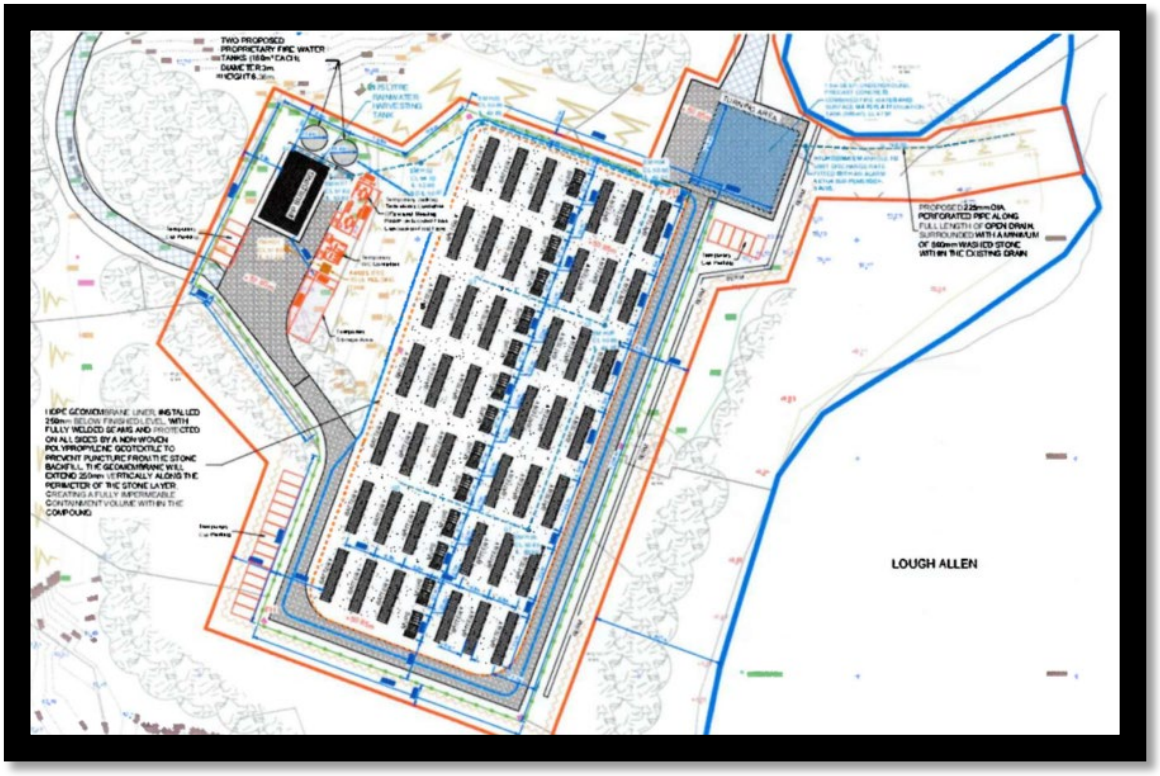


Figure 1.2 - Site Layout - 0405-p-1010



2. DOCUMENT LIST AND DRAWINGS

Document Name	Description
0405-P-1000	Proposed Site Location
0405-p-1010	Detailed proposed layout
Ryan & Associates Fire Risk Assessment – 13th August 2025	Fire Risk Assessment of the proposed site
Halston Environmental and Planning – December 2025	Water risk management plan
Moore Archaeological & Environmental services – 17th August 2025	Technical note – Ecology and water management
Halston Construction Environmental Management Plan – December 2023	Construction and Environmental management plan during construction phase

Technical Document	Description
Grid Scale Battery Energy Storage System planning – Guidance for Fire and Rescue Service	Document created by the National Fire Chiefs Council within the UK to support Fire Safety for Battery Energy Storage System planning.
Technical Guidance Document B - Fire Safety - Volume 1 Buildings other than Dwelling Houses	Guidance Document provided by Department of Housing, Local Government and Heritage to support Building Regulations.

3. SUITABILITY OF FIRE SAFETY AND EMERGENCY PLANNING SYSTEMS PROPOSED

Expert opinion on fire safety measures proposed within Fire Risk Assessment:

Ryan & Associates Fire Risk Assessment – 13th August 2025

A comprehensive Fire Risk Management Plan has been requested by An Coimisiún Pleanála to address all fire-related matters and to reduce the risk of fire both during construction and operation of the site. A Fire Risk Assessment (FRA) has been submitted by the applicant, which covers all relevant aspects of fire safety and references the following technical standards and specifications:

- UL 9540A – Standard Test Method for Evaluating Thermal Runaway Fire Propagation in Battery Energy Storage Systems
- NSAII.S. 10101 - National Rules for Electrical Installations in Ireland
- NFPA855 (2023) – Standard for the Installation of Stationary Energy Storage systems
- FPA Zurich REI – Battery Storage Fire Safety Guidance
- ESB Networks Grid Code and Connection Standards relevant to medium-voltage infrastructure, local and regional fire authority regulations, and planning conditions
- Local and regional fire authority regulations and planning conditions
- National Fire Chiefs Council: Grid-Scale Battery Energy Storage System Planning – Guidance for Fire and Rescue Services

These technical specifications are appropriate for BESS installations and suitable for risk assessment. Their application is suitable when carrying out an assessment of the associated fire risks.

The following sections will provide commentary on each section of the Ryan & Associates FRA to demonstrate if compliance has been met with the conditions applied.

Section 2.1of the Ryan & Associates FRA – Battery containers

Section 2.1 describes the type of Battery Energy Storage Solution (BESS) container and its current Heating Ventilation Air Conditioning systems and fire safety features. Whilst the Fire Risk Assessment does not mention the battery chemistry within this section, further into the report it states that the batteries will be Lithium Ion.

The following points are made in comparison to the National Fire Chiefs Council (NFCC) guidance.

- The proposed spacing between containers (4.5 meters apart) is not within typical NFCC guidance recommendations (6m spacing) that safe separation distances be maintained to prevent fire spread and allow emergency vehicle access, noting NFCC references minimum aisle separations of around 2.4 m and side separations depending on battery chemistry and fire resistance ratings. **Action:** 4.5-meter distance between containers is only compliant dependant on the battery chemistry in use and whether the design has been fire engineered to allow this. The following insert has been taken directly from the NFCC Guidance. "A standard minimum spacing between units of 6 metres is suggested unless suitable design features can be introduced to reduce that spacing. If reducing distances, a clear, evidence based, case for the reduction should be shown."

- Fire safety features like smoke, heat, and carbon monoxide detection, manual alarms, aerosol fire suppression, deflagration relief panels, and ventilation match components recommended by NFCC for containment and hazard mitigation.
- Thermal insulation and ambient operating temperature ranges align with NFCC emphasis on temperature control and mitigation of thermal runaway.
- The FRA specifies the number of containers and their layout (six rows, seven columns), matching recommendations for clear site planning.

Section 2.3 of the Ryan & Associates FRA – Independent Power Producer building

The IPP building appears to be designed to local building codes with fire detection and suppression systems designed to protect critical equipment, which will further aid risk reduction for the entire site.

Section 2.4 of the Ryan & Associates FRA – Fire water infrastructure and Site access

The proposed water infrastructure generally aligns with NFCC guidance for large-scale Battery Energy Storage Systems (BESS) in critical areas related to firefighting water supply, emergency vehicle access, and site containment.

- The two 180 cubic meter fire water storage tanks provide a combined 360 m^3 capacity, which meets the NFCC minimum recommendation of around 1900 L/min for 2 hours (approximately 228 m^3) water supply for firefighting. This supports adequate manual firefighting resources onsite.
- Vehicle access around 90% of the perimeter, with minimum 4.5-meter-wide access roads and turning areas, complies with NFCC standards for emergency vehicle manoeuvring and access to BESS containers.
- Enclosing the battery storage area with a 2.65-meter-high palisade fence is consistent with NFCC site security recommendations to prevent unauthorized access.

The proposed development would be regarded as compliant with NFCC guidance principles, assuming the tanks, hydrants, and access are maintained and fully operational. Any final compliance confirmation should include site-specific risk assessments and local fire service consultation.

Section 3 of the Ryan & Associates FRA – Hazard identification.

This section identifies the key hazards found within the proposed BESS container site such as thermal runway, propagation risk, gas emissions, electrical faults and a cooling system failure, arcing faults, thermal overloads and overheating, oil spills and fire risk, electrical shock hazards and maintenance, operational procedure risks, compartmentation and environmental risks. EDP believes this covers all hazard areas which could be applicable to a site of this type. A further risk assessment and analysis are carried out in detail in section 4.1, with mitigations.

Section 4.1 of the Ryan & Associates FRA – Likelihood and consequence of fire events

The section on likely fire scenarios at the BESS Arigna facility covers the core scenarios which are to be addressed expected in NFCC BESS guidance, including localised thermal runaway, container-level fires, inter-container fire propagation, electrical fires within medium-voltage power stations (MVPS) and Independent Power Producer (IPP) buildings, as well as environmental and community impacts from smoke, toxic gases, and fire water runoff.

Section 4.2 of the Ryan & Associates FRA – Risk Assessment Methodology

Section 4.2 presents a qualitative risk matrix which indicates an average risk rating of medium to medium-high. Comments are included outlining the control measures implemented to mitigate identified risks. The proposed mitigations are appropriate and align with NFCC guidance.

The risk rating provided follows a logical and structured approach consistent with NFCC guidance for assessing fire risks at Battery Energy Storage System (BESS) facilities. It qualitatively considers likelihood, consequence, and overall risk rating for key scenarios such as single cell thermal runaway, full container fires, fire spread between containers, electrical faults in MVPS and IPP buildings, and environmental contamination. Additional commentary on risk mitigation effective is provided in 4.4 which overall is appropriate and in line with current NFCC fire-risk mitigation best practices for BESS installation safety, this addresses the layered defence concept fundamental to NFCC's approach.

Section 5 of the Ryan & Associates FRA – Proposed fire prevention and protective measures

The proposals in the section are in line with NFCC guidance for Battery Energy Storage Systems (BESS) fire safety and mitigation:

- **Structural fire protection and compartmentalisation**: Use of fire-resistant enclosure materials with mineral wool insulation to prevent thermal propagation matches NFCC recommendations for containment and fire spread prevention. Insulated cavity walls and fire-rated doors in critical buildings help maintain compartmentation consistent with NFCC principles.
- **Fire detection systems**: Early warning systems including smoke, heat, carbon monoxide, and hydrogen gas detectors are aligned with NFCC guidance for comprehensive multi-parameter detection inside containers, MVPS enclosures, and buildings. Manual fire alarm pull stations with audible/visual alerts match NFCC requirements for fire alerting.
- **Fire suppression systems**: Aerosol suppression inside battery containers and modular steel houses reflects NFCC recognition of effective suppression methods for lithium-ion battery fires. MVPS arc-fault resistant switchgear and potential gaseous or water mist suppression systems comply with electrical fire safety standards. Sprinkler or gaseous systems in IPP buildings are also consistent with NFCC best practices.
- **Ventilation and explosion relief**: Active ventilation to remove smoke, explosive, and toxic gases, alongside deflagration panels for overpressure relief, are key NFCC recommendations to manage explosion hazards and safe venting.

Overall, the proposals outlined above comprehensively cover essential NFCC guidance elements for fire prevention, detection, suppression, ventilation, and explosion mitigation for BESS facilities. Implementing these measures with proper design, maintenance, testing, and emergency planning should achieve NFCC-compliant fire safety for the proposed development.

Section of the Ryan & Associates FRA 5.5 – Fire water Storage and Hydrant Provision

Based strictly on the details provided, the proposed fire water infrastructure meets, and in some areas exceeds, key compliance points outlined in NFCC guidance for BESS sites. Key elements such as water quantity, flow rate, hydrant positioning, mechanical protection, and environmental management appear sufficient. Final installation and sign-off should always be confirmed through local building control.

Section of the Ryan & Associates FRA 5.6 – Emergency Vehicle Access and Site Design

Section 5.6 appropriately addresses emergency vehicle access and site layout—critical factors in supporting fire service operations.

- Provision for vehicle access and turning areas along approximately 90% of the site perimeter aligns with NFCC recommendations for perimeter roads suitable for fire service vehicles
- The access routes, maintaining minimum widths of 4.5 m, are marginally below the 6 m standard often cited in international codes but remain compliant with UK guidance, provided the local Fire and Rescue Service has confirmed suitability for their fleet.
- NFCC guidance calls for hardstanding roads free from extreme gradients and suitable for use in all weather conditions, which the proposed design achieves. The layout demonstrates sound adherence to NFCC principles—ensuring robust perimeter access, compatible access road dimensions, and effective vegetation management. Final verification should be undertaken directly with the local Fire and Rescue Service to confirm vehicle compatibility and operational standards.

Section 6 of the Ryan & Associates FRA – Emergency preparedness and response

The Emergency Preparedness response section demonstrates comprehensive alignment with NFCC expectations for BESS emergency preparedness, response planning, operational coordination, and staff competency. Appendix E holds the full ERP and is commented on later in this report.

Section 7.1 of the Ryan & Associates FRA – Summary of Fire Risks

EDP concurs with the key findings outlined in the FRA and supports the recommendations stated in Section 7.2. All proposed fire safety measures should be verified and approved through local building control sign-off.

Appendix C.1 of the Ryan & Associates FRA – Fire Detection and Suppression Systems

Appendix C.1 outlines the proposed early fire detection and warning strategy within the proposed BESS containers. The use of photoelectric smoke detectors in battery containers, MVPS, and IPP buildings aligns with NFCC recommendations for early detection of combustion products in key risk areas.

Electrochemical detection of carbon monoxide and hydrogen gas, as supported by NFCC and UK fire authority guidance, provides additional safety by enabling early intervention before visible smoke conditions.

There are proposals to integrate with a remotely monitored, central Fire Detection and Alarm System (FDAS) offering 24/7 surveillance ensures rapid notification, system integrity, and improved coordination with emergency services. This layered detection approach is consistent with NFCC guidance for both fire and hazardous gas management in BESS installations.

Appendix C.2 of the Ryan & Associates FRA – Fire Suppression Systems

Appendix C.2 details the proposed fire suppression arrangements:

"Battery storage containers and modular steel enclosures are equipped with solid aerosol fire suppression systems. These systems release fine particulate aerosols upon activation, extinguishing fires by interrupting the chemical chain reactions sustaining combustion. They are designed for rapid automatic discharge triggered by detector activation or manual override."

NFCC guidance recognises a range of mitigation strategies, including detection and suppression options. But acceptance of a specific suppression technology (solid aerosol) depends on design details, UL/third-party testing, compatibility with the particular battery rack and UL 9540A results.

Action: The fire risk assessment should specify "aerosol suppression is recognised when designed, installed and maintained to standard and when validated for the system." Provide specific manufacturer/specification evidence and test certificates. The FRA confirms that suppression methods will be matched to specific hazards (battery, electrical, and oil-based fires), however further detail on this is required.

Appendix E of the Ryan & Associates FRA – Emergency Response Plan

Appendix E sets out the Emergency Response Plan (ERP) for the site, defining procedures and responsibilities for effective emergency management. The plan aims to protect life, minimize damage to property and the environment, and ensure timely notification and efficient response from trained site personnel. EDP considers the ERP suitable and sufficient. If correctly implemented and maintained, it will ensure an appropriate and effective response to fire-related incidents.

Overall Conclusion:

Based on the further information provided by the applicant to ABP reviewed, EDP is satisfied that the information presented within the Fire Risk Assessment (FRA) and Emergency Response Plan (ERP) demonstrates a well-considered approach to fire safety in accordance with current best practice and applicable guidance for grid-scale Battery Energy Storage Systems (BESS).

The FRA has adopted a structured methodology consistent with the qualitative principles outlined in PAS 79 and NFCC technical guidance. The identified hazards, likelihood assessments, and proposed control measures collectively indicate that the primary risks have been properly recognised and addressed. The inclusion of multiple detection technologies, robust fire suppression strategies, and clearly defined emergency procedures provides a comprehensive safety framework that supports both life safety and resilience of operations.

Mitigation measures have been designed to reduce the overall risk profile of the development to a tolerable level when evaluated against industry benchmarks. The proposed infrastructure which includes fire water storage, hydrant provision, and access routes exhibit proactive consideration of operational firefighting needs and environmental protection requirements. The planned maintenance and monitoring regimes, if properly implemented, will help ensure continued effectiveness throughout the life cycle of the installation.

The ERP also outlines a clear chain of command for incident response, incorporating escalation pathways to emergency services and defined responsibilities for on-site personnel. This procedural clarity ensures that, in the event of an incident, response actions are coordinated, timely, and proportionate to the scale of a potential emergency.

In conclusion, it is EDP's professional opinion that the combination of technical design controls, procedural safeguards, and adherence to NFCC guidance provides a robust foundation for the management of fire safety risks at the site. The FRA and ERP, taken together, are suitable and sufficient when implemented as described.

EDP recommends that all design, installation, and operational measures are subject to verification by local building control and the relevant Fire and Rescue Service prior to commissioning. Continuous review, including post-installation testing and periodic reassessment, will further ensure that the residual level of fire risk remains within acceptable industry thresholds.

Expert opinion on fire safety measures proposed against Chief Fire Officer Report:

Chief Fire Officer Report – Fire Services & Building control report – No date provided.

The following commentary is provided to ensure that all measures identified by the local Fire and Rescue service have been met within the Fire Risk Assessment provided.

Fire and Rescue Service Request One:

Provide a consequence and dispersion model for the plant taking into account Fire and Explosion.

The FRA qualitatively assesses fire and explosion consequences (Section 4.1 – 4.3), outlining risk levels such as *"very low likelihood, potential high consequence"* for full container fires and *"deflagration panels providing overpressure relief"* for explosion events. However, there is no quantitative dispersion or consequence modelling (for gas release, smoke, or explosion overpressure). The assessment relies on qualitative risk ratings instead of computational or empirical dispersion models. Using only a qualitative approach to risk assessment, without incorporating any quantitative data or modelling, presents potential significant risks regarding accuracy, consistency, and a comprehensive understanding of true safety levels.

Using a computational dispersal model (quantitative) over qualitative risk modelling for smoke calculation offers significant advantages in accuracy, detail, objectivity, and informed decision-making to further evidence that risk has been reduce to as low as reasonably practicable.

The above could be seen as a deficiency in the applicants response, however, with further justification, the applicant could potentially demonstrate that the proposed development has no requirement for qualitative risk assessment due to the location of the proposed site and other factors such as the rural location.

Fire and Rescue Service Request Two:

Provide a hazard analysis for the design, operation and maintenance of the plant to include preventative measure for fire and explosion.

Hazard identification is covered extensively in Section 3 of the FRA:

- Fire hazards in battery containers (thermal runaway, gas emissions).
- Electrical hazards in MVPS and IPP (arcing faults, overloads).
- Environmental and community impacts (fire water, toxic gases).

Preventative measures are described through insulation, suppression, ventilation, and engineering controls. The analysis explicitly links hazards with mitigation measures across design, operation, and maintenance.

Fire and Rescue Service Request Three:

Provide a design stage risk assessment for the design, operation and maintenance of the plant to include preventative measure for fire and explosion.

Section 4 (Risk Assessment and Analysis) provides a structured risk matrix, categorising likelihood, consequence, and overall rating for each scenario. This constitutes a design-stage qualitative risk assessment, consistent with NFCC and NFPA 855 guidance. Risks are addressed with design-based mitigation such as spacing between containers, aerosol suppression, deflagration relief, and compartmentalisation

Fire and Rescue Service Request Four:

Submit details on the management of potentially explosive atmospheres to include an explosion protection document and hazardous area classification for the area containing the BESS storage modules.

The FRA references ATEX Directive 2014/34/EU related controls through ventilation and deflagration panels (Sections 5.4 and 4.3), which vent gases safely away from personnel and critical assets. However, it does not include a formal Explosion Protection Document or Hazardous Area Classification in ATEX format. It aligns with ATEX principles but stops short of providing full compliance evidence. It is of EDP's belief that this could be seen as a deficiency in the applicants response, with further justification this requirement could be mitigated by the applicant by including information on this within the FRA.

Fire and Rescue Service Request Five:

Demonstrate evidence of compliance with the ATEX regulations.

ATEX-aligned systems (gas detection, overpressure relief, ventilation) are described, and UL 9540A and NFPA 855 both ALIGN with ATEX risk management are cited as reference standards. Nonetheless, the document does not explicitly declare ATEX conformity or zone classification, so compliance evidence is implied rather than demonstrated.

Fire and Rescue Service Request Six:

Demonstrate pressure relief and ventilation provisions for the BESS modules.

Detailed description of deflagration panels and active ventilation systems is provided. These are installed to vent gases from thermal runaway events away from staff and critical infrastructure. HVAC systems (61.2 kW cooling) and hydrogen/CO gas detection ensure pressure and thermal control. This condition is clearly satisfied.

Fire and Rescue Service Request Seven:

Details of fire suppression systems to be provided (special extinguishing agents shall be matched to the appropriate hazard)

Fire suppression is described as Solid aerosol suppression within containers. Gaseous/water mist suppression for MVPS and IPP buildings. Integrated smoke, heat, CO, and hydrogen detectors for early activation. System specifications align with UL 9540A and NFPA 855 guidance. The FRA confirms that suppression methods are matched to specific hazards (battery, electrical, and oil-based fires).

Fire and Rescue Service Request Eight:

Demonstrate how firefighting / extinguishing agent run off is to be managed (details of bunding system sand storage tanks capacity to be provided) details of drainage mechanism to be confirmed.

Section 5.5 of the FRA provides explicit details on two fire water storage tanks (180 m^3 each) with hydrant capacity (1,900 L/min for ≥ 2 hours). Full bunding, drainage interceptors, and fire water containment systems to prevent environmental contamination. Coordination with local Fire & Rescue Service confirmed. This fully satisfies the runoff management condition.

Fire and Rescue Service Request Nine:

Provide full technical details and specifications of the batteries that will be used on this development confirming whether it is proposed to use first life new independently tested and certified batteries or if second life or older previously used batteries will be re-purposed for use as part of this development with the reference to UL1974 or other appropriate technical guidance).

Section 2.1 identifies Samsung SDI E4D 2P336S lithium-ion racks (4.9 MWh per container) and includes thermal and fire-safety design data

However, the FRA does not confirm whether the batteries are first-life or second-life units, nor does it reference UL 1974 for re-purposed cells. UL 9540A is referenced for system testing, which supports design compliance, but condition 9 requires a specific statement on battery provenance and certification, this is missing. It is of EDP's belief that it should be stated within a revised, final FRA and can be addressed by way of condition.

Overall conclusion:
The Ryan & Associates FRA for the Arigna BESS facility meets most of the fire safety planning issues raised by the Chief Fire Officer (2, 3, 6, 7, 8 fully; 1, 4, 5, 9 partially).

The key deficiencies are the absence of:

- A quantitative consequence/dispersion model.
- Formal ATEX zoning and documentation.
- Explicit confirmation of battery lifecycle (first or second life) and UL 1974 certification.

It is recommended by EDP that these requirements are conditioned by ABP as part of the planning process or at least mitigated with evidence by the applicant as to why they have been omitted.

Moore Archaeological & Environmental services – 17th August 2025

A detailed technical note has been prepared by Moore Archaeological & Environmental Services to set out the methodology and design measures adopted for the effective management of fire water runoff at the proposed development. The documentation confirms that the site's fire water supply and containment infrastructure has been designed and installed in alignment with recognised national and international standards, codes of practice, and established best-practice guidance to ensure effective support for emergency firefighting operations.

The technical note further identifies that the Fire Risk Management Plan incorporates specific design controls for the containment, storage, and controlled discharge of firefighting water. Hydrological analysis undertaken by Moore Archaeological confirms that these provisions eliminate the potential for cross-contamination with surrounding terrestrial habitats or designated ecological receptors. There is no hydrological link to any sensitive European sites, and connectivity to Lough Forbes is recorded at approximately 50 kilometres downstream, meaning any residual environmental risk is negligible.

This assessment represents a thorough and precautionary approach to environmental protection, embedding fire water management as a key component of the overall site fire safety strategy. The control measures described not only meet regulatory expectations under UK and EU environmental management frameworks but also demonstrate the developer's commitment to safeguarding water quality and ecological integrity in line with sustainable infrastructure practice.

Overall conclusion:

The measures proposed by the FRMP and Water Management Plan for fire water runoff containment and control are considered suitable, sufficient, and proportionate to the scale and nature of the development. They provide an appropriate level of resilience against environmental pollution arising from fire-related incidents or suppression activities. It remains essential that all installations and containment systems are inspected, tested, and signed off by local building control during the construction phase to validate that the completed works achieve the intended performance standards and environmental protection objective.

4. SUMMARY OF FINDINGS

The below table is a summary of findings based on the information provided.

Section reference	Action stated
Section 2.1	Verify spacing between battery containers meets NFCC guidance or if the reduction of spacing has been justified by fire engineered design. Standard minimum spacing is 6 meters unless designs reduce this with evidence.
Section C.2	Confirm fire suppression system specifications with manufacturers' UL 9540A test certificates for aerosol suppression and others.
Section 5	Validate construction materials and compartmentation meet fire resistance requirements.
Section 4.1	Include fire and explosion consequence dispersion modelling as requested by Fire and Rescue service.
Section 4.3	There is no formal submission of an Explosion Protection Document or hazardous area (zone) classification as required under ATEX Directive 2014/34/EU (Fire and Rescue Service Request Four and Five).
Section 2.1	Clarify battery provenance: first-life or second-life, including UL 1974 certification for re-purposed cells.

11B Waterside Court, St Helens,
Merseyside, WA9 1UA
email: info@edp-uk.com

Office: +44 (0)1744 766000
Registered in England No: 3799102