



# PPS Electrical.

## A proud member of the Shepley Group

PPS Electrical have been engaged on the Sellafield site for the last 27 years, and we are the only nominated contractor on Sellafield for isolating live electrical equipment, which also supports our commissioning and permit office activities. We are also the only accredited fire alarm installer permanently based on the Sellafield site. We also have a panel manufacturing facility in Barrow-in-Furness that supports our nuclear operations as well as clients within the rail industry.

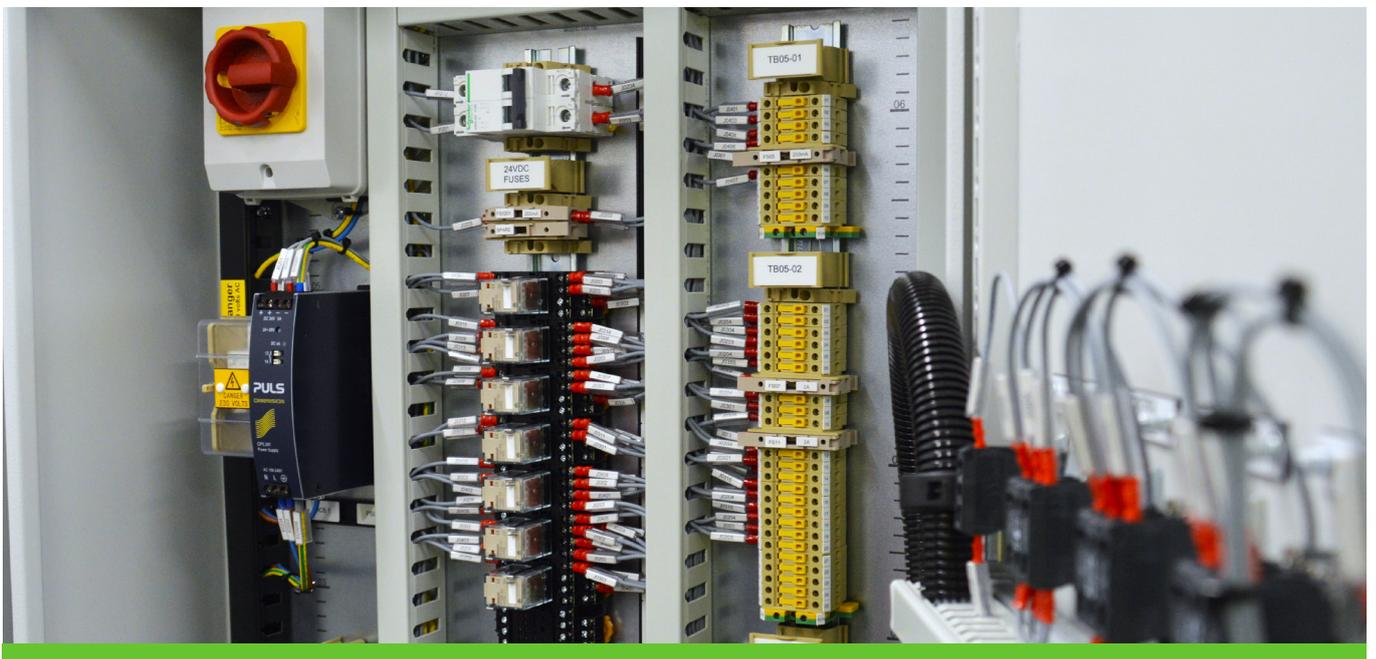
# Developing high performing people, building a legacy of excellence.

## About us.



PPS Electrical are a well established specialist electrical and instrumentation contractor who have developed an excellent reputation within the nuclear and chemical process plant environments. Our work involves a comprehensive range of electrical and instrumentation support within these particularly challenging sectors. We have a head office including a large workshop and panel manufacturing facilities in Barrow in Furness as well as a number of site specific establishments. We have been engaged on the Sellafield site since 1995, where we have an office complex and a site compound including stores and a large workshop.

PPS Electrical are a JIB registered organisation and members of the Electrical Contractors Association as well as the ECIA. We have a very healthy training and development agenda with a large domestic apprenticeship scheme to deal with the anticipated future demands within our sector.



## Our vision

Continue to develop high performing people & strive to build a legacy of excellence within our sectors.

## Our Group in numbers



Professional Team

**285**



Tradespeople

**389**



Enhanced Cleared

**52%**

As of February 2023

**Our values,  
vision and  
ethos are at  
the heart of  
what we do.**



## **Our ethos.**

Whether we're working alongside our Group members or operating independently, our culture remains consistent. We put our clients first, supporting their business needs and delivering engineering solutions with commitment, care and consideration. Long term relationships are key to our business model and our people are at the heart of everything we do. Our high performing employees dedicate themselves to delivering customer requirements and we promote an environment that stimulates diversity, innovation, teamwork and continuous improvement.

The strength of our business comes from the wide range of complementary services that we offer. We have core capabilities in Manufacturing and fabrication, mechanical and electrical installation works, E&I panel manufacture, HVAC installation, Decommissioning, decontamination services and specialist restoration & renovation - operating across the United Kingdom.

Our experience of delivering complex projects in some of the UK's most challenging environments is what sets us apart. Delivering safe and sustainable solutions to today's engineering challenges while operating to the highest levels of safety and quality, our dedicated teams can manage integrated solutions from engineering support to manufacturing and installation to commissioning.





# The core values of our group »



## We are customer focused

Our business model is based on a partnership with our customer to ensure that every interaction is intended to support the customer which in turn assists our business to learn and grow. Our organisation thrives from successful delivery for our customers, we make every decision and measure every outcome based on how well it serves them.



## Committed to Right First Time

We have a passion for accuracy and getting it right first time, every time.

Our teams work diligently to implement our proven processes and procedures throughout the lifecycle of a project, and by doing so we believe we provide excellence by all of our people throughout our organisation.



## Our people are key to our success

Our employees and the relationships developed over time are the beating heart of Shepley Engineers, this significantly contributes to our ongoing success. We continually develop our employees to enable them to achieve their full potential and have a proven history of internal progression.



## We are proactive and adaptable.

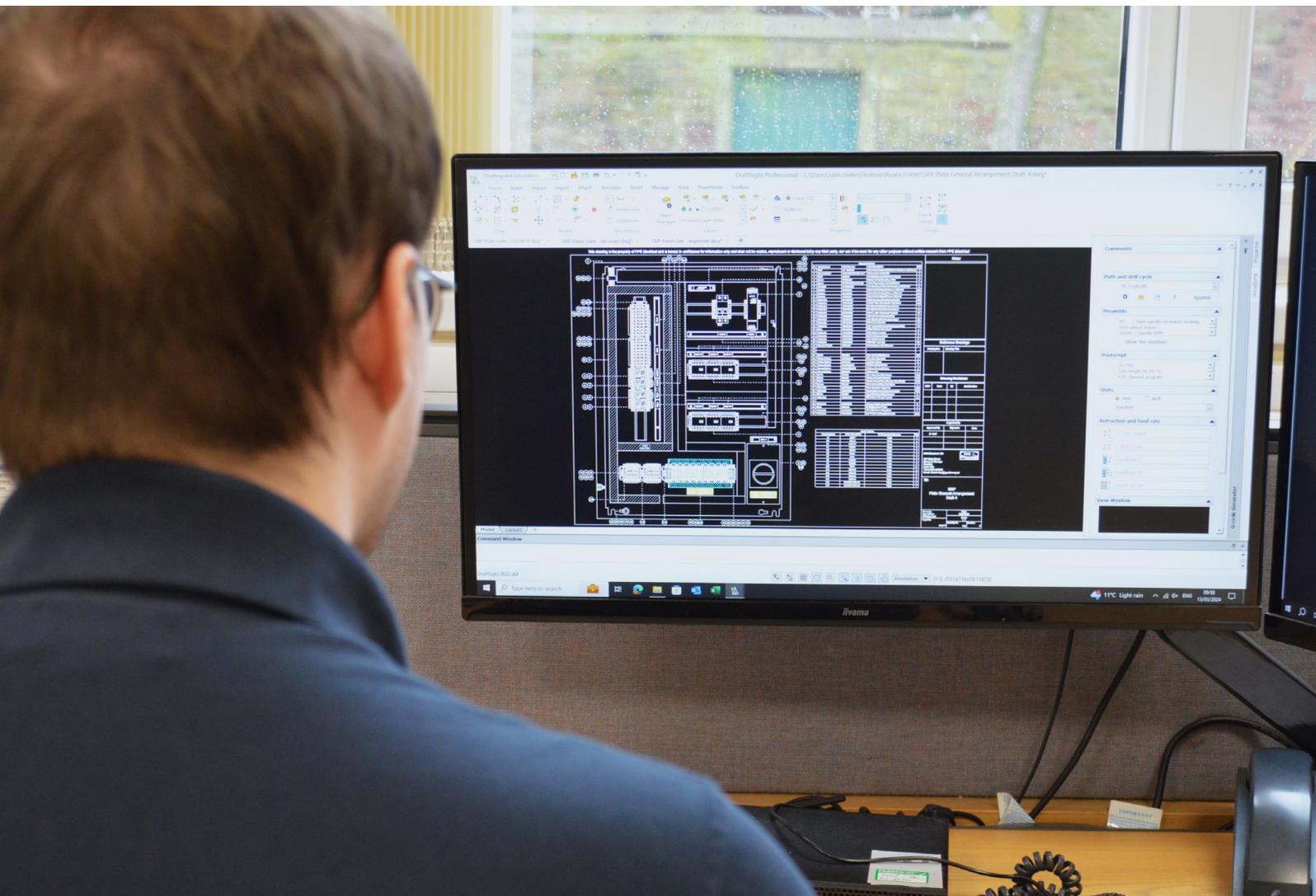
Our success stems from the ethos across the business to drive projects and achieve positive outcomes for our customers and partners.

Our agile structure allows us to quickly adapt to situations and respond positively to our customers needs whilst continuously looking for ways to improve what we do.

# Overview.

Part of the Shepley Group, PPS Electrical are a well established CE&I contractor with an excellent reputation for delivering a wide range of services and products to the most exacting quality and safety standards. The successful business model we have developed has seen us become a major presence in the extremely challenging nuclear sector and we are currently exploring opportunities to expand into the rail sector through our in-house manufacturing division. Our approach to delivery is simple and is based around the ethos of applied learning and collaborative working practices. The sharing of our knowledge and expertise we feel adds value to our customers and is instrumental in helping us meet their individual expectations.

As with any successful organisation our greatest asset is our people and it is our continued investment in their development that ensures excellence in everything we do. That commitment to excellence through training extends through all levels of the organisation from boardroom right down to the shop floor. At PPS we also recognise that we have a responsibility to protect the future of our industry by developing the next generation of engineers. In partnership with our training providers PPS operate one of the most comprehensive apprentice development schemes sponsoring candidates from NVQ level right through to our graduate training programme. The development of our business model allied to our investment in personnel has afforded PPS significant opportunities to expand the range of services we offer to compliment our traditional installation and manufacturing capabilities.



# What we offer.

- Site based CE&I installation across the complete project spectrum
- Manufacture of high quality control and distribution equipment
- Installation of instrumentation pipework services
- BAFE SP203-1 accredited fire alarm installer
- Maintenance of temporary CE&I plant service equipment
- Decommissioning of redundant plant equipment and services
- Provision of technical engineering and project management support
- Provision of commissioning and permit control services
- Integrated test facility and rig hall
- Project Management Services
- Passive Fire Protection
- Commissioning

## Accreditations.



**ISO 9001**

Quality Management



**ISO 14001**

Environmental Management



**ISO 45001**

Health and Safety Standards



**BAFE SP203-1**

Fire Alarm Installation

IP65

CB19 Power Supply  
AC 100-230/240V  
N L

DANGER  
LIVE GNI SUPPLY  
FROM IDB109/WAYS

Detailed description: This block shows the top section of the equipment rack. On the left, there is a white IP65-rated enclosure. In the center, a blue CB19 power supply is mounted, with AC input terminals labeled 'N' and 'L'. To the right, a grey 'SCREEN BAR' is visible. A yellow warning label reads 'DANGER LIVE GNI SUPPLY FROM IDB109/WAYS'. Various colored cables (blue, brown, green) are connected to the power supply.

58015 58017 58019 58021

FRANCONIA BM 303

Detailed description: This block shows a row of FRANCONIA BM 303 terminal blocks. Each block is black with a red label that includes the brand name 'FRANCONIA' and the model 'BM 303'. Numerous fiber optic cables with yellow and grey jackets are plugged into the blocks. The cables are labeled with white tags, some showing numbers like 'J104', 'J105', 'J106', 'J107', 'J108', 'J109', 'J110', 'J111', 'J112', 'J113', 'J114', 'J115', 'J116', 'J117', 'J118', 'J119', 'J120', 'J121', 'J122', 'J123', 'J124', 'J125', 'J126', 'J127', 'J128', 'J129', 'J130', 'J131', 'J132', 'J133', 'J134', 'J135', 'J136', 'J137', 'J138', 'J139', 'J140', 'J141', 'J142', 'J143', 'J144', 'J145', 'J146', 'J147', 'J148', 'J149', 'J150', 'J151', 'J152', 'J153', 'J154', 'J155', 'J156', 'J157', 'J158', 'J159', 'J160', 'J161', 'J162', 'J163', 'J164', 'J165', 'J166', 'J167', 'J168', 'J169', 'J170', 'J171', 'J172', 'J173', 'J174', 'J175', 'J176', 'J177', 'J178', 'J179', 'J180', 'J181', 'J182', 'J183', 'J184', 'J185', 'J186', 'J187', 'J188', 'J189', 'J190', 'J191', 'J192', 'J193', 'J194', 'J195', 'J196', 'J197', 'J198', 'J199', 'J200'. The blocks are mounted on a grey metal rack.

FRANCONIA BM 303

Detailed description: This block shows another row of FRANCONIA BM 303 terminal blocks, similar to the one above. It features the same black and red design and is populated with fiber optic cables labeled with white tags. The cables are organized in a consistent manner across the row.



The proof is in the pudding.

# Case Studies.

## Rail Signalling Systems

Developed by PPS and Bender UK, the Rail Signalling (RS3 & RS4) integrated insulation monitoring and earth fault location equipment provides proven protection for railway electrical systems.

RS versions deliver multi-tier smart cable insulation monitoring and fault location in order to monitor, provide early warning and pinpoint insulation problems - to prevent rail downtime and improve operations and safety. This system was accepted Network Rail and we manufactured circa 900 RS3 units to date.

Following the fire on the London underground the RS1 version was developed and manufacture, then over the years we have moved to the latest prototype (RS4). Currently the RS4 prototype is in the process of being accepted by Network Rail, giving us the opportunity to manufacture a further considerable number of units.



### More Case Studies?

Read our full case studies online at [www.ppselectrical.co.uk/case-studies](http://www.ppselectrical.co.uk/case-studies) or scan the QR code



# First Generation Reprocessing Plant **Power Distribution.**

Due to the age and unsustainable conditions of existing equipment within the First Generation Reprocessing Plant a new LV distribution needed to be installed. This required a new switchroom which would be situated outside of the building to enable the future decommissioning and demolition works of the building with minimal disruption.

Phase 1 of the project had been earlier installed by PPS and involved running in the new supply cables for the new switchroom and installing a LV pillar inside the building to temporary feed existing equipment until the second phase was completed.

Phase 2 general breakdown listed below:

- New switchroom installed
- New bus bar system installed
- New DB boards and tap off points installed.
- New cabling installed to new and existing equipment
- New containment and earthing system installed.
- Modifications to existing plant to bring up to standard.

During the installation of phase 2 it was also apparent that it would be beneficial for PPS to commission the installation and so various PPS personnel were trained to carry out new roles as nominated personnel and one PPS supervisor was trained up to carry out AP duties on Sellafield's behalf.

Although a full design was submitted and accepted, the project still brought various challenges in the installation phase. PPS used their historical knowledge of working in these types of buildings to aid in design changes and highlighting options to save time and money by using different methods and installation techniques to progress the project.



## Case Study

# Evaporator D.

<b>Client</b>	Costain
<b>Value</b>	£47,000,000
<b>Workforce</b>	145
<b>Cabling Installed</b>	160
<b>Terminations</b>	75,000

## Overview.

**At the time of construction, Evaporator D was the largest nuclear decommissioning project in the UK. It was designed to continue reduction of the volume of highly active legacy waste.**

With Evaporator C having outlived its shelf life, Evaporator D was designed to reduce the volume of Sellafield's most radioactive waste product – highly active liquor. The plant is the only evaporator on the site able to process high-level liquid waste created during the clean-out of the Sellafield's reprocessing plants. It reduces the volume of liquor so it can be turned into gas form and safely stored.

PPS Electrical provided resource and materials for the CE&I equipment, containment and cabling installation. PPS was also responsible for the installation and maintenance of the site and associated facilities temporary supplies. We were also responsible for the full installation of all E&I related systems including, but not limited to; Building Evacuation, Fire Detection, VESDA & Dampers, CCTV, Building Security, Radiological, Personnel & Environmental Monitoring, Building Management System, Small Power & Lighting, General Power, UPS & Emergency Power, through wall lighting and cameras, process systems, various vent systems, ICC, package sub stations, cooling towers, diesel generators and trace heating. PPS has also provided 24 hour, 7-day "temporary" electrical supplies for the site.

The installation is seismically qualified, which includes the Cable Containment System and associated bracket work. Working in close cooperation, coordination and proximity with other trades due to restrictive physical constraints of the building was one of the main challenges that PPS Electrical successfully overcame.

One of the key challenges to building Evaporator Delta was the location of the evaporator building – next to an operational facility and on a restricted footprint, which was adjacent to the site train lines. This made it difficult to build this complex plant in situ. The build phase was a combination of onsite rooms and corridors with the in-cell modules pre-fabricated off site, delivered by barge and installed by crane. CE&I install was scheduled round the delivery of the modules and hook up was an onsite activity.

Due to the constricted space within the envelope of the building it was difficult for different disciplines to work together compounded by the lack of space for storage or lay down areas. This led to the necessity for a multi-disciplined build strategy by room working from the highest level to ground level within each room.

The necessity to work in collaboration with other disciplines was key to the success of the project. We also provided CE&I white- and blue-collar resource to support the commissioning phase of the project.





**Doing our bit  
environmentally  
and socially.**

# We strive to make a difference.

We understand the impact our business has on our local communities and the environment. We are committed to utilising our resource to ensure the communities we serve are self-sustainable, through our Skills Academy, training and development programme and local SME Spend.

## Environmental in numbers

EV Chargers  
**10**

Renewable tariffs  
**100%**

Landfill diversion  
**100%**

Van Fleet Reduction  
**50%**

Estimated CO2 saved  
**74 tonne**

## Social impact in numbers

Hours volunteering  
**900+**

Grant Donations  
**£14,500**

Individual donations  
**£5,500**

Initiatives supported  
**51**

Work Experience Days  
**35**

Statistics for Oct 2022 - Sept 2023

# Get in touch.



**The Shepley Group**

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 Shepley Group

 Shepley Engineers Ltd



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of Renew Holdings Plc