



CASE STUDY

SAFE SYSTEM OF WORK / QAQC / COMMISSIONING SCOPES

BACKGROUND

AEP Global was consulted by our client to provide a fully operational Permit Office providing a Safe System of Work (SSOW) and a Commissioning Team for a new 40MW Data Centre build in Sweden. AEP Global provided personnel from initial inspection and verification (Level 1, FAT & Red Tag) through to commissioning and handover (Level 2, Yellow Tag, Level 3, Green Tag, and Level 4, White Tag) along with support services for Level 5 IST (integrated System Testing).

- 1 x Energy Marshall
- 2 x Cx Managers
- 1 x Cx Lead
- 6 x Cx Engineers
- 3 x HV Senior Authorised Persons
- 9 x Authorised Persons
- 2 x QAQC Engineers
- 2 x Testing Supervisors
- 15 x Testers

AEP Global was responsible for implementing our client's SSOW for the full site consisting of over 3000 isolations in place from 20kV to 230V. The Energy Marshall was responsible for implementing client safety rules along with end-client electrical procedures. Creating a

info@aep-global.com

www.aep-global.com

Site-Specific Electrical Safety Plan (SSESP) defining all safe working procedures, authorisation process and system boundaries.

LOTO Procedures and PTW Training were provided for all personnel on site by AEP supplied personnel working in our Client's Permit Office, due to the multinational language barrier, the AEP Global team created a safety video demonstration to streamline the PTW process on behalf of our Client. This video showed everything from filling in the PTW request, Issuing the PTW, how to lock on the site lockout box, where to sign on and off daily on the PTW, and how to clear the PTW.

The SSOW implemented by the AEP Global provided Energy Marshall, scored 100% compliance with the end client safety audit, being the first 100% compliance achieved in Sweden, making this the flagship site for our client.



AEP Global Provided our Client with an Energy Marshall and Cx Manager who held daily meetings with GC/Client/Vendors for power on schedule to ensure all parties were aligned to meet the project milestones. All systems were safely Energised from HV Ring 20kV to LV Distribution with no reportable accidents or incidents.

The Cx Team were responsible for the commissioning of the following: - LV switchboards, UPS Systems, PDU's and associated Busways. The commissioning team was responsible for all Load Banking activities and completion of Level 3 Cx Scripts ready for IST and client handover.

PROJECT DESCRIPTION

Data Centre Project Sweden

Building an extension of colocation on the existing Data Centre in Gavle, Sweden. AEP Global has a long-standing relationship with Tier 1 companies to supply professional personnel to support large projects for some of the Global top 100 companies.

Sweden's Data Centre region is committed to cutting carbon emissions, achieving zero waste certification, and running on 100% carbon-free energy. Sweden's Data Centre region will be powered by 100% carbon-free energy with 24/7 hourly energy matching with partner Vattenfall. To support its operations, The end Client has signed agreements for new renewable energy projects with Major Global Companies. In addition, Sweden is the end client's first Data Centre region whose backup generators will run on Preem Evolution Diesel Plus, the world's first Nordic Eco-labelled fuel, which contains at least 50% renewable raw material, and nearly an equivalent reduction in net carbon dioxide emissions compared with standard fossil diesel blends.

The end Client is pursuing Leadership in Energy and Environmental Design (LEED) Gold certification for the region, which will help conserve additional resources like energy and water, generate less waste and support human health. In addition, the new Data Centre region will be home to the end Clients third European Circular Centre, which repurposes servers and hardware in our Data Centre. These centres are the first of their kind in the industry. The Swedish Circular Centre will have the ability to support 12,000 servers per month. Supporting the company's water-positive by 2030 commitment, the Data Centre's servers will be cooled with only outside air 100% of the year, and rainwater will be captured at the Data Centre, used primarily to provide humidification and to support onsite Data Centre facilities. "Our Swedish Data Centres are among the most sustainably designed and operated in the world. This is an important launch for Sweden and Europe.



KEY SUMMARY



**MOBILISED 38 x
PROJECT PERSONNEL**



**SUPPLYING TRAINED &
COMPETENT PERSONNEL**



**SETTING RECORD
BREAKING
STANDARDS**



**PROVEN AND
TRUSTED SUPPLIER**



**FAST ACTING WITH
LESSONS LEARNED**



**NO ACCIDENTS OR
INCIDENTS**

info@aep-global.com

www.aep-global.com