RailBusinessDaily

HS2 shortlists bidders for high voltage power supply systems

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HS2 has shortlisted bidders for its high voltage (HV) power supply systems. The winning organisations will go on to deliver electrical systems covering 280km of the UK's new high speed rail link and enable millions of people to enjoy low carbon journeys between London, Birmingham and the north of England.

Following on from the start of construction, the announcement unlocks more long-term opportunities for Britain's construction and engineering sector, as the UK builds back from the coronavirus pandemic.

The contract opportunity covers the design and construction between London, Birmingham and Crewe, where HS2 trains will join the existing West Coast Mainline.

The following organisations will be invited to tender:

- Colas / Eiffage Joint Venture
- Siemens Ltd / Costain Ltd Joint Venture
- SSE Enterprise Contracting / Linxon / Arcadis Joint Venture
- UK Power Networks Services (Contracting) Ltd

The winner of the contract – worth an estimated £523m – will be responsible for the design as well as manufacture, supply, installation, testing, commissioning and maintenance of the HV power supply systems.

Approximately 50 traction sub-stations will be built alongside the line between London and Crewe in order to deliver power from the National Grid to the trains. The contractor will also deliver a dedicated HV non-traction power network that will provide power to stations, shafts, portals, depots and railway systems along the route.

Once operational, HS2 will be one of the lowest carbon ways to travel, with just 8g of carbon emitted per passenger kilometre – in comparison to 67g by car and 170g by air. Electricity will come from the national grid, so as the UK's power supply transitions to entirely renewable sources, journeys on HS2 will become carbon neutral.

The successful Tenderer will be responsible for design and will be expected to work closely with HS2's other rail systems suppliers to ensure integration of its design and throughout construction, testing and commissioning.

HS2 Ltd's Procurement and Commercial Director, David Poole said: "The shortlist for high voltage power supply systems is another major milestone as we put in place the key rail systems teams that will take over once the civil engineering stage is finished.

"Once complete, HS2 will be one of the lowest carbon ways to travel, freeing up more capacity on the existing rail network and helping to take cars and lorries off the roads. Our power supply systems are a crucial part of the project and part of a solution which will help the UK reach net zero by 2050."

The HV Power Systems will be a single stage procurement, with the successful tenderer delivering two separate contracts covering Design & Build and Maintenance services within Phase One and Phase 2a – from London to Crewe, where HS2 services will join the existing west coast main line.

The traction power sub-stations are located at multidisciplinary Railway Systems Compounds which are situated in the open route section of the line. The contractor will assume the role of Principal Contractor within these compounds. The successful tenderer will be expected to work closely with HS2's other rail systems suppliers to ensure integration of its design and throughout construction, testing and commissioning.

Contracts are expected to be awarded in 2022.

Photo credit: HS2 Ltd