

BJÖRN KARLSSON

Björn Karlsson received his M.Sc. in Engineering Physics at Uppsala University in 2013. He has about 10 years of experience in high voltage testing and engineering from his employments at STRI and Hitachi Energy. Since April 2022 Björn is working as a Specialist at Independent Insulation Group, Sweden, where he will work with high voltage technology and connection studies for wind and solar power.



MAIN FIELDS OF COMPETENCE

- Power system analysis
 - Static and dynamic simulations and modelling
 - Grid code compliance studies and processes as per EU 2016/631 “RfG” and EIFS 2018:2
 - High voltage testing
 - Test-circuits
 - Transient studies (Lightning/switching impulse)
 - Measuring techniques
 - Partial discharge
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WORK EXPERIENCE

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| 2022 – | Independent Insulation Group Sweden AB , Ludvika, Sweden
<i>Specialist</i> |
| 2019 – 2022 | Hitachi Energy, STRI , Ludvika, Sweden
<i>Senior Test Engineer</i>
The work is similar to the position as Test Engineer, but as a Senior Test Engineer the work is also focused on improving test methods and test circuits, measuring techniques, different types of investigations, quotations etc. |
| 2018 – 2019 | Hitachi ABB Power Grids , Ludvika, Sweden
<i>Quality & OpEx Testing Specialist</i>
In the role as Quality & OpEx Testing Specialist the work was focused on improving test laboratories and test methods to ensure best quality and results in the products and organization. |
| 2013 – 2018 | STRI AB , Ludvika, Sweden
<i>Test Engineer</i>
As a test engineer at STRI I got experience as project manager for a various types of high voltage tests on components such as breakers, bushings, GIS, VSC-/LCC-valves, cable systems etc. Different type of measuring techniques for AC, DC, lightning |

impulse, switching impulse, partial discharge, fast and very fast transients etc. are commonly used in the projects.

EDUCATIONAL DEGREES

2008 – 2013 **Master of Science in Engineering Physics**
 Uppsala University, Uppsala, Sweden.
 Thesis: Comparison of PSSE & PowerFactory

LANGUAGES

Swedish (native), English (professional level)

LIST OF PROJECTS

2022-	<i>Conceptual studies for offshore wind</i> Studies in PowerFactory with the aim to investigate different conceptual solutions to enable connection of a large offshore wind farm. Studies include dimensioning of components and evaluation of different control strategies.
2022-	<i>Connection studies for BESS</i> Connection studies for a battery energy storage system.
2022-	<i>Grid code compliance simulations – RfG and EIFS 2018:2 for numerous wind farms</i> Grid code compliance simulations as per RfG and EIFS 2018:2 for numerous wind farms. The studies were performed in PowerFactory.
2022-	<i>Connection studies for numerous wind and solar farms</i> Connection studies for numerous wind and solar farms. The studies considered, for example, reactive power capability and cable dimensioning under normal and fault conditions, as well as evaluation of different turbine types. Studies were performed in PowerFactory.
2013 -	<i>Project manager for >50 high voltage test projects such as type tests, R&D, destructive</i> • High voltage components such as breakers, bushings, insulators, transformers etc. • VSC- and LCC-valves • Cable systems • GIS-equipment • Live-line working equipment • Partial discharge • Radio interference voltage
