

Documentation work – Hybrid AC/DC grid

Source: Wang, P., Goel, L., Liu, X., & Choo, F.H. (2013). Harmonizing AC and DC: A Hybrid AC/DC Future Grid Solution. *IEEE Power and Energy Magazine*, 11, 76-83.

Questions:

1. What is “the war of currents”? Explain both the context and the resolution.
2. What is behind the acronym “HVDC”? What are the motivations for preferring this technology rather than the present transmission AC network?
3. Explain the recent significant changes in distribution networks making electrical engineers reconsidering DC as a viable alternative to the present AC distribution network.
4. Which solution is proposed by the author? Explain the first grid structure proposed.

Note: Skip the section named *Hybrid DC/AC Grid Structure II* together with Figure 4 .