Certification of Tidal Turbines and Arrays Published

The service specification DNVGL-SE-0163 Certification of tidal turbines and arrays is being published along with a technical standard for DNVGL-ST-0164 Tidal turbines. The service specification is a new document built on the foundations of DNV-OSS-312 Certification of Tidal and Wave Energy Converters and the GL Guideline for the Certification of Ocean Energy Converters. Those two legacy documents have been important elements in the development of the tidal industry to date but the industry's needs have changed as it matures.

The service specification DNVGL-SE-0163 is of specific interest to tidal turbine and tidal array developers but will also have a wider general interest to other stakeholders such as investors, insurers and regulatory authorities. For tidal turbine developers the new service specification provides a clear scope for type certification which is key to opening up commercial opportunities for volume production. The technical standard DNVGL-ST-0164 Tidal Turbines also is available online.

The commercial impacts on developers become greater as the size of turbines and scale of planned arrays increases. Therefore more attention is paid to the reduction of risk and the processes through which risk is controlled and mitigated. This has been the core around which the service specification has been built, keeping the elements of the risk based approach used in technology qualification and the earlier DNV-OSS-312 but setting a clear structure and guidance on how you move from prototype through to type and project certification.

Project developers themselves will be interested both in what a 'type certified' turbine means but also in certifying their own projects to satisfy their investors and insurers that they have controlled their risks.

Image: Tidal turbines installed along the Dutch Afsluitdijk.