



Tarbert Next Generation Power Station

Summer 2023

SSE Thermal would like to introduce you to the Tarbert Next Generation Power Station. This project proposes to develop a new power station at the site of the existing power station at Tarbert Island, Tarbert, County Kerry.



Public Consultation Events – In-Person and Online

We will be holding two in-person Public Consultation events:

- 18th July, Tarbert Community Centre, Tarbert, 5:30pm-9pm.
- 19th July, Listowel Arms Hotel, Listowel, 5:30pm-9pm.

You are invited to attend either of these events to meet the Project Team, learn more about the proposed development, ask any questions you may have and provide feedback. You are also welcome to learn about the project and provide your feedback through our online consultation room which can be accessed via the SSE Thermal website, by visiting:

www.ssethermal.com/flexible-generation/development/tarbert-next-generation/

Our online consultation room will be open from July 10th and closes on August 2nd.

What is the Tarbert Next Generation Power Station project?



Note: The existing Tarbert Power Station, due to close in late 2023.

SSE Thermal is proposing that the site of the existing Tarbert Power Station will provide the location for a new power station which would run on 100% sustainable biofuel, Hydrotreated Vegetable Oil (HVO).

The proposed development consists of a 350MW Open Cycle Gas Turbine (OCGT) fueled by HVO. An OCGT plant has been selected for the proposed development as it is able to respond rapidly to changes in the electricity demand by starting up quickly and achieving full output within a short period of time.

What about the site?

The site for the proposed Tarbert Next Generation Power Station is within the boundaries of the existing Tarbert Power Station site, in the townland of Tarbert Island, Tarbert, County Kerry.

The site is suitable for several reasons:

- It is located on brownfield land within an existing power station context.
- It benefits from existing electricity transmission and fuel supply infrastructure.
- It is directly accessible by the national road network.
- It is in close proximity to key infrastructure such as Shannon Foynes Port.

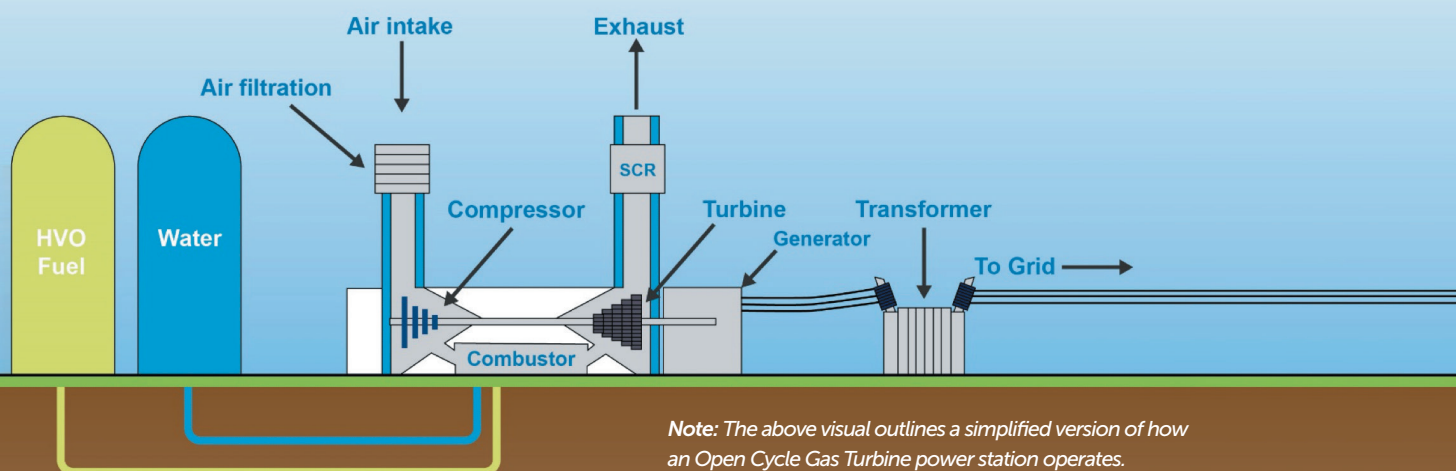
In addition, the site is located on the Shannon Estuary, an area with the potential to be a crucial location in Ireland for onshore and offshore energy generation which could contribute to sustainable economic growth.



Note: The site of the existing Tarbert Power Station. The new development will be fully enclosed within the existing site.

What is biofuel? What is HVO?

Biofuel provides a lower net carbon option for use in power stations, using waste feed stocks to produce valuable flexible electricity, making it an important transitional solution as plans for widespread use of hydrogen develop. The proposed station in Tarbert will run on Hydrotreated Vegetable Oil (HVO), which is a type of biofuel that is produced by processing waste oils to create a fossil-free alternative to distillate-oil in accordance with EU sustainability standards. HVO is a waste by-product and does not involve any food displacement. It has a lower greenhouse gas emissions profile across its lifetime compared to fossil fuel alternatives such as diesel and natural gas.



How will the station work?

The proposed development is for an Open Cycle Gas Turbine (OCGT) plant. The plant will include one single OCGT unit and will be used as a 'peaking' plant; operating for short periods of time as a backup power source when demand is high and there is a shortfall in supply from renewable sources such as wind and solar. The gas turbine technology proposed facilitates fast plant start-up and can provide the response capability to meet sudden fluctuations in electricity demand on the grid.

Flexible Generation

The transition to a greener, net-zero world will be renewables-led. Nevertheless, we need 'on-demand' flexible generation – power that can be turned on and off when the system needs – as a backup to support our electricity system when the wind doesn't blow, or the sun doesn't shine. This will make sure the lights stay on, the engine of industry is kept firing and connectivity is maintained in our increasingly digital world.

Hydrogen Potential

While we are proposing that this station would run on 100% biofuel and our forthcoming planning application is for an OCGT planned fueled by HVO only, this proposed development could utilise hydrogen in the future. Hydrogen has the potential to play a major role as a fuel for flexible power stations. As an energy vector that does not contain carbon, there are no carbon dioxide emissions at point of use. Instead, when burnt with oxygen, the by-product is water.



We appreciate that any new development is a matter of great importance to the local community. Listed below are some key issues which we know will be of interest to the community in Tarbert and the wider area.



Socio Economic Impact

The existing Tarbert Power Station has been a key employer in Tarbert and the wider North Kerry area since the 1960s. The proposed Tarbert Next Generation Power Station has the potential to secure power generation at the site, and resulting employment, into the future. Furthermore, during construction and operation there will be inward investment to the region, with employment and expenditure in the local economy.



Air Quality and Noise

Comprehensive air quality and noise modelling will be completed as part of the assessments for the planning application and will factor in surrounding plans, projects, residences and businesses in the immediate area. The potential effects of the proposed development will be evaluated including how the air quality will be controlled so as to not affect local residents and biodiversity. Improvements will be sought as a result of transitioning from heavy fuel oil to HVO generation. Air Quality emissions will be controlled through the environmental permit for the power station issued by the Environmental Protection Agency (EPA). With regard to noise and vibration the potential effects of the construction and operation of the proposed development will be designed and controlled to ensure it does not affect the local environment.



Traffic

The design of the project will take full account of potential concerns about both traffic safety as well as traffic loads and associated noise and air emissions – both in the vicinity of the site, as well as the wider community. Mitigation measures to reduce the impact of traffic from the proposed development will be put in place. Furthermore, construction traffic will operate in accordance with a Construction Environment Management Plan that will include measures to avoid and minimize construction traffic disruption where possible.



Visual Impact

The proposed development will require a new emissions stack which will be lower in height than the existing historic stacks. The new power station will be designed with an appropriate scheme to blend into its setting within an existing power station. A landscape and visual impact assessment will be undertaken, and photomontages prepared to assess the design.



Biodiversity

Ecology surveys are being undertaken to identify habitats and species present within the development site and assess the potential impacts of the construction and operational phases of the proposed development on terrestrial flora and fauna. There are a number of designated sites close to the proposed development including The Shannon and River Fergus Estuaries Special Protection Area (SPA) and The Shannon Estuary, a Special Area of Conservation (SAC). A Natura Impact Statement will be prepared and submitted as part of the planning application.



What happens next?

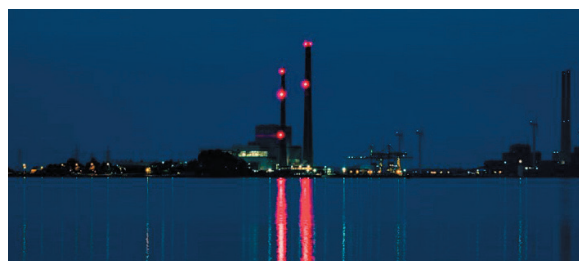
Our online public consultation room for the **Tarbert Next Generation Power Station** will open on **July 10th** and can be found via www.ssethermal.com/flexible-generation/development/tarbert-next-generation/, closing on **August 2nd**. We will also be holding in-person consultation events in **Tarbert Community Centre, Tarbert (July 18th, 5:30pm-9pm)** and in the **Listowel Arms Hotel, Listowel (July 19th, 5:30pm-9pm)**, which you are invited to attend. We are eager to hear your views and answer any question you may have, so please call by to learn about our plans and meet the Project Team or leave your feedback via our online consultation room.

The statutory consultation period for formal comment and submissions will open once the planning application has been lodged. This will be publicized through the required notices at the site entrance and newspaper advertisements. As you can see from the above timeline, we intend to submit the planning application in Autumn 2023. It is anticipated that the application will be submitted to An Bord Pleanála as a Strategic Infrastructure Development. An Environmental Impact Assessment Report and a Natura Impact Statement will form part of the submission. Construction could start in 2024 and the station could be operational in 2026.

Other SSE Developments in Tarbert

Temporary Emergency Generation

Following a request from Irish authorities, SSE Thermal is proceeding with a Temporary Emergency Generation (TEG) project at Tarbert, which will provide an additional 150MW of generation capacity and cease operations no later than 2028. This project was consented in April 2023 with construction due to start shortly.



Tarbert Offshore Wind Farm

Earlier this year, our colleagues in SSE Renewables announced that they are seeking an investigative foreshore licence to facilitate survey work for a proposed new offshore wind farm in the Atlantic Ocean off the coast of Tarbert which could generate up to 1GW of clean, renewable energy. This marks SSE Renewables' first licence application for an offshore wind project off the west coast of Ireland.



Tarbert Battery Energy Storage Systems

SSE Solar and Battery are seeking to deploy at least 100MW | 200MWh of Battery Storage at Tarbert. This project was granted planning permission in 2019. This project is strategically important as it can assist in stabilising the electricity network and maximising renewable energy output.



Contact Us

If you would like to hear further about the project or our consultation activities, or if you have any other queries please contact our **Community Liaison Officer, Conor Joy** on Conor.Joy@sse.com or **087 057 3409**.

In SSE Thermal, our mission is to provide the energy needed today while building a better world of energy for tomorrow. We operate an industry-leading fleet of flexible generation and energy storage assets, with over 600 direct employees across Ireland and the UK. We believe flexible and efficient thermal energy will play a critical role in the transition to a net zero future, complementing renewable generation and maintaining security of supply. Our vision is to become the leading provider of flexible thermal energy in a net zero world.

