



Infrastructure Code of Practice

Elgin / Franklin

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DESCRIPTION

The Elgin field is located in Block 22/30b and Block 22/30c of the UK sector of the North Sea, approximately 200 km due east of Aberdeen (57° 00'42"N 01°50'16"E) in a water depth of 92m. The Franklin and West Franklin satellites are situated 5.5 km south of Elgin in Block 29/5b and Block 29/4d at a similar depth.

The Franklin reservoir was discovered in 1986 while Elgin was discovered five years later in 1991. Both reservoirs are HP/HT with reservoir pressure c.1100 bar and temperature c.190°C.

Elgin/Franklin came onstream in 2001 and is one of the largest HP/HT installations in the world. The Elgin Franklin complex currently consists of four wellhead platforms (Elgin A, Elgin B, Franklin & West Franklin) with the Elgin A WHP linked to the Elgin PUQ (Process, Utilities and Quarters) platform by a bridge and the Franklin WHP linked by a subsea pipeline bundle and umbilical.

The PUQ was designed to process 15.5 Mm³/d to National Grid and Interconnector delivery specifications. Offshore processing on the PUQ enables the gas to be exported at sales quality directly to market through the SEAL pipeline system and the Bacton Terminal. Condensate is shipped through the Graben Area Export Line (GAEL) and the Forties Pipeline System (FPS) to Kinneil for stabilisation.

Under the current expectations of long-term oil and gas prices and indications given by investors, the infrastructure is expected to be operational until 2040

OWNERSHIP

Ownership interests in Elgin / Franklin are as follows:

Company	Equity Interest
TotalEnergies E&P UK Limited	15.7730%
E.F. Oil & Gas Limited (EFOG)	10.4000%
TotalEnergies Offshore UK Limited	20.0000%
Ithaca EF Limited	21.8670%
Premier Oil UK Limited	19.3100%
NEO Energy Petroleum Limited	4.3750%
Ithaca SP E&P Limited	6.0875%
ONE-Dyas E&P Limited	2.1875%
Total	100.0000%

SERVICES WE PROVIDE

We offer the following service levels to third-parties: **Gas and Liquids Transportation and Processing**

- Fields tie-in upstream of the Elgin/Franklin PUQ for processing. Liquids are separated and exported via the GAEL system. Gas is treated to sales specification on the PUQ and exported to the National Grid via the SEAL line.

Facilities and Technical Information

The Elgin Process, Utilities and Quarters Platform (PUQ) is based on the TPG 500 jack-up concept. This is a self-elevating and self-piling jack-up installation with a triangular hull in plan view. The process system on the Elgin PUQ separates gas from condensate, treats the gas to sales quality and exports the treated gas and condensate through separate pipelines. Additionally, the PUQ has installed water treatment capacity for about 25,000 BPD, after installation of compact flotation units in 2009, and gas compression power of 120MW. To power these services, the PUQ has a power generation capacity of 62MW (2 x 31MW). A 90-person core crew operates the facilities with a maximum POB limit of 138 (bed limit).

The Elgin A, Franklin, Elgin B and West Franklin well head platforms, are for well fluid collection and export only, all well fluids are processed on the PUQ. The Elgin A platform is linked via an 80m bridge to the PUQ with the Elgin B platform linked to the Elgin A platform via a 95m bridge. The Franklin platform is connected to the PUQ via a 5.5 km interfield pipeline with West Franklin platform connected via a 5.2 km interfield pipeline to the Elgin B platform. All wellhead platforms are four legged and steel jacketed.

Liquids Processing and Export

Liquids are separated on the PUQ and treated to the GAEL entry specification. The liquids processing design capacity is 175,000 bopd. The export route is through the 24" GAEL line to Forties Unity, and subsequently through FPS. The FPS, operated by INEOS FPS, provides liquids and raw gas processing services.

Gas Processing and Export

The gas treatment plant removes CO₂ and H₂S, controls dew point and calorific value and other characteristics, to meet National Grid delivery specifications. The design capacity of the gas treatment plant is 15.5 Mm³/d. Gas from Elgin and Franklin is exported 468 km through the 34" SEAL pipeline to the facilities reception and metering terminal at Bacton.

The SEAL pipeline is operated by TotalEnergies and the SEAL terminal at Bacton is operated by Shell

TECHNICAL SPECIFICATION

Entry and redelivery specifications for the Elgin PUQ will be negotiated as part of the technical inputs to any tie-in agreements.

COMMERCIAL PROCESS

Elgin/Franklin aims for an efficient negotiation process that helps give commercial confidence to third-party developments. In this section we outline how we aim to negotiate and the types of items that may be considered during a negotiation. Further information on the process or terms and conditions can be obtained by contacting our commercial team as detailed on the Contact Us page.

As a general rule, where an offshore tie-in or additional equipment is required to process the enquirer's gas, the associated capital expenditure (capex) is charged directly to the service user. Where equipment is exclusive to a particular user, then opex for such equipment will be at their sole cost.

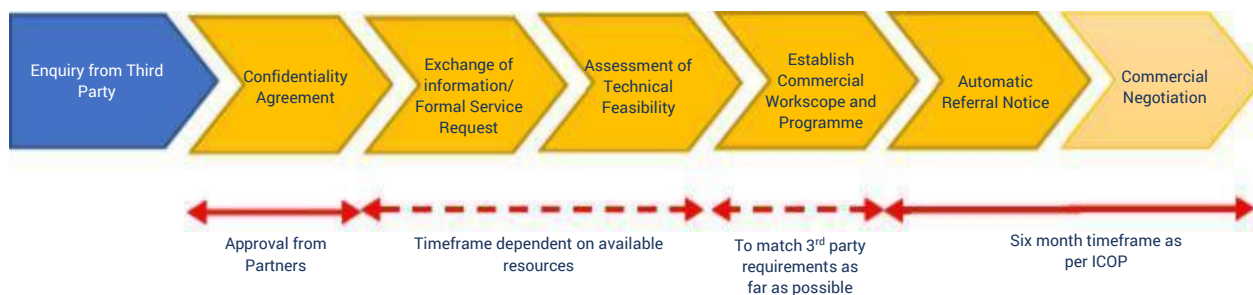
Connecting to Elgin / Franklin

TotalEnergies E&P UK Ltd would normally perform engineering and modifications work for such equipment on behalf of new users. Ownership of the offshore tie-in or additional equipment would be transferred to the Elgin/Franklin Owners on completion of the works.

The tie-in point for third party access would be via the new Elgin B wellhead platform.

How We Work

Elgin / Franklin is committed to the **Commercial Code of Practice** and the **Oil and Gas UK Infrastructure Code of Practice**. We aim to respond in a timely manner to all service enquiries. The typical process for negotiations is as follows:



The process typically starts with a formal written enquiry from the Operator (or substitute commercial operator) of the field development group requiring access to the infrastructure containing relevant field information and an outline of requirements in accordance with the process described in the **Code of Practice on Access to Upstream Oil and Gas Infrastructure on the UK Continental Shelf**.

Standard Terms and Conditions

Elgin / Franklin PUQ facilities operate in a highly competitive area of the North Sea. We seek to provide both attractive terms and conditions and an equitable negotiation process to parties interested in utilising our infrastructure. Individual terms and conditions may vary according to the needs of tie-in parties.

Tariffs and Operating Costs

Tariff and/or cost share information will form part of any commercial offer made by the Elgin-Franklin owners and will depend on the level of service requested by the incoming field.

Throughput

Capacity Basis

For transportation only services, capacity is offered subject to unreserved capacity in the CATS pipeline system. In the case of the platform processing and transportation service, the service is offered on a firm or reasonable endeavors basis. The profile and duration of the firm service will be negotiated on a case-by-case basis as well as the required notice period for amendments to the production profile.

Send or Pay

These conditions are negotiated with incoming parties on an individual basis dependent on the level of service required.

Capital Works

Tie-in and Construction

Flexible tie-in and construction arrangements are offered depending on the needs of individual parties.

Investment

The cost of tying-in to the Elgin/Franklin PUQ will fall to the tie-in party as will the cost of decommissioning any third party facilities.

Start-up and Duration

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In order to ensure capacity is available in the PUQ and export infrastructure at the appropriate time we will work with third parties to help to meet their commercial timelines. This could include a funnelling mechanism in the contract that ensures that each party sequentially commits to the start date as more information about the development becomes available. Elgin/Franklin is a development with a long future ahead of it, so the duration of the contract can be negotiated on an individual basis.

Other Conditions

In addition, the following conditions will form the basis of negotiations:

- Maintenance – An annual shutdown plan for the Elgin Franklin facilities is prepared in advance and to coincide with the shutdown of connected facilities (as far as possible).
- Governing Law and Disputes – English law will govern the agreement and disputes for certain technical matters will be settled through expert determination.
- Liabilities and Indemnities – will be based on the Industry Mutual Hold Harmless standard established in the UKCS, however the tying-in party should provide full indemnity up to an agreed cap during the construction and tie-in phase (except for wilful misconduct of the Operator). All tie-ins must become party to the SEAL cross-user liability agreement along with the GAEL Spurline Users Agreement.

ULLAGE PROFILES

The ullage in the various components of the Elgin / Frankling transportation and processing system is given in the following sections. The ullage is based on the Operator's best estimates at the time of publishing. Ullages for CATS pipeline, CATS processing, TGPP and NGL storage providers are provided by the respective system operators.

The traffic light system is used to communicate ullage as follows:

Ullage as % of system capacity	
<5%	●
5% to 25%	●
>25%	●

Elgin PUQ

The ullage profile for the different components of the Elgin PUQ is as follows:

	Capacity	2025	2026	2027	2028	2029	2030	2031	2032	2033
Oil export	175,000 bbl/d	●	●	●	●	●	●	●	●	●
Gas Compression	15.5 Msm3/d	●	●	●	●	●	●	●	●	●
Gas Export	15.5 Msm3/d	●	●	●	●	●	●	●	●	●
Gas Lift	Nil *	●	●	●	●	●	●	●	●	●
Produced Water Handling	4,000 m3/d *	●	●	●	●	●	●	●	●	●
Dehydration	15.5 Msm3/d	●	●	●	●	●	●	●	●	●
H2S Removal	15.5 Msm3/d	●	●	●	●	●	●	●	●	●
Water Injection	Nil *	●	●	●	●	●	●	●	●	●
Power Generation MW	31MW	●	●	●	●	●	●	●	●	●

*Future modifications may increase capacity/ullage.

COMPLETED TRANSACTIONS

The Glenelg field is the sole tie-in to Elgin Franklin to date.

CONTACT US

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