

Design notification scheme

Document No: A951046

Date: 13/05/2024

Explanatory Note:

An Exposure Draft of the Offshore Electricity Infrastructure Amendment Regulations 2024 (OEI Regulations) was released for public consultation by the Department of Climate Change, Energy, the Environment and Water (DCCEEW) on 12 April 2024.

The Offshore Infrastructure Regulator (OIR) has prepared this document to provide preliminary information to stakeholders on the preparation of design notifications under the *Offshore Electricity Infrastructure Act 2021* (OEI Act) framework.

Persons using this document should be aware that it is based on the current Exposure Draft of the OEI Regulations which may be subject to change following public consultation and before finalisation. For this reason, references to specific regulation numbers have not been included in the document. However, references to specific provisions under the OEI Act are included throughout as this legislation is currently in force.

This document is intended to provide early-stage information on content and level of detail for design notifications and will be amended to align with any regulatory changes progressed by DCCEEW following the Exposure Draft period.

As this draft document is based on the Exposure Draft OEI Regulations only, it should not be relied upon for the preparation of a final design notification to be submitted to the OIR once regulations are in force.

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1. Background

The Offshore Infrastructure Regulator (OIR), established by the *Offshore Electricity Infrastructure Act 2021* (OEI Act), is responsible for overseeing work health and safety, **infrastructure integrity**¹ and environmental management for **offshore infrastructure activities**² in the **Commonwealth offshore area**³.

2. Purpose

The purpose of the design notification scheme under the OEI framework is to ensure that design aspects critical to the management of safety, infrastructure integrity and environmental management are considered early in the lifecycle of offshore infrastructure projects and that design decisions are made taking these considerations into account, particularly for those projects developed under a **transmission and infrastructure licence**⁴ and a **commercial licence**⁵.

The purpose of this document is to provide OEI Act licence holders with information to support the preparation of a design notification.

3. Scope

This document describes the requirements for a design notification which is a prerequisite in the following scenarios:

- where the holder of a **feasibility licence**⁶ intends to submit a **management plan**⁷ in relation to a future commercial licence
- where the holder of a transmission and infrastructure licence intends to submit a management plan for activities authorised under the licence.

Other scenarios whereby a design notification can be voluntarily submitted include:

- where the holder of a **research and demonstration licence**⁸ intends to submit a management plan; and
- at any stage in the project where the licence holder would like to obtain the feedback from the OIR.

In all the above cases, it is recommended that the licence holder begin early engagement with the OIR.

4. Disclaimer

This document is not a legal instrument and does not override or amend the requirements of the OEI Act or Offshore Electricity Infrastructure Regulations 2022 (OEI Regulations) in any way. It is provided to inform

¹ See section 8 of the OEI Act.

² Ibid

³ Ibid

⁴ See section 8 and section 61 of the OEI Act.

⁵ See section 8 and section 42 of the OEI Act.

⁶ See section 8 and section 33 of the OEI Act.

⁷ See section 8 of the OEI Act.

⁸ See section 8 and section 52 of the OEI Act.

stakeholders and does not limit the discretion of the OIR to take any action it considers appropriate under relevant legislation. It reflects the current position of the OIR, which may change from time to time. All changes will be notified publicly.

5. Relevant legislation

The following Commonwealth legislation is relevant to the preparation of a design notification:

- *Offshore Electricity Infrastructure Act 2021* (OEI Act)
- Offshore Electricity Infrastructure Regulations 2022 (OEI Regulations)
- *Work Health and Safety Act 2011* (WHS Act) as applied under the OEI Act
- Work Health and Safety Regulations 2011 (WHS Regulations) as applied under the OEI Regulations
- *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act)
- Environment Protection and Biodiversity Conservation Regulations 2000 (EPBC Regulations)

This document does not cover legislative requirements beyond the scope of the OEI Act framework and related legislation listed above. The reader should be aware of and comply with all other Commonwealth, State and Territory legislative requirements that may apply to their activities.

6. Design notification

A design notification will set out a licence holder's design concept, layout and engineering selection for offshore renewable energy infrastructure and offshore electricity transmission infrastructure. This includes the processes used to determine the suitable type of infrastructure with consideration for safety, infrastructure integrity, environmental management and on water interactions within the licence area.

The design notification should be submitted to the OIR at the preliminary design stage for consideration and feedback. The intention at this stage of the design is for the OIR to raise questions, concerns, and issues such that these can be addressed by the licence holder prior to the detailed design and engineering phase for the infrastructure proposed under the applicable licence type.

As illustrated in **Figure 1**, the effect of early identification and mitigation of risks during the planning and early design stages are easier to incorporate and will often have a lower cost impact when undertaken early.

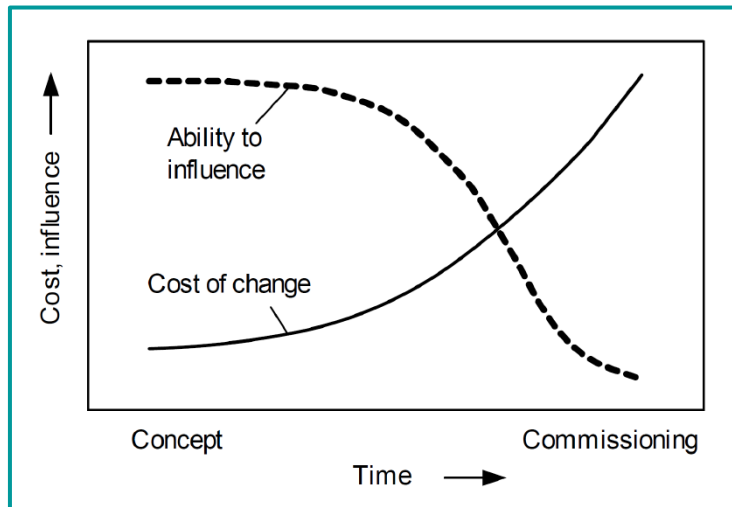


Figure 1 – Effect of early identification and mitigation of risks

6.1. Intent of the design notification

The design notification is intended to describe how **licence infrastructure**⁹ will be designed such that it can be constructed, operated, maintained, decommissioned, and removed in a way that will:

- contribute to the reduction of risks to the health and safety of workers so far as is reasonably practicable
- demonstrate that the design and approach take into account environmental management and protection obligations and the specific environmental conditions into which the infrastructure is proposed to be placed
- demonstrate that careful design consideration has been given to the engineering and integrity of the infrastructure. This includes:
 - construction and interface of all major components; and
 - how all structures, equipment, and property will remain in good condition throughout the planned life of the infrastructure, and that the infrastructure can be safely decommissioned and removed at the end of its operational life.

6.2. Design notification for a transmission and infrastructure licence

In the case of a transmission and infrastructure licence, the design notification is prepared and submitted to the OIR after the grant of the transmission and infrastructure licence and prior to the submission of the management plan.

⁹ See section 8 of the OEI Act

6.3. Design notification for a commercial licence

In the case of a commercial licence, the design notification is prepared and submitted to the OIR in the period after the feasibility licence has been granted and prior to the submission of the management plan for a proposed commercial licence.

Note: a licence holder may develop an offshore infrastructure project across multiple licences or licence types. In this circumstance the licence holder may wish to submit a single design notification to cover multiple management plans and licences.

6.4. Design notification content requirements

A design notification will need to be submitted in the manner and form that is approved by the OIR and published on the OIR website.

Within the design notification the licence holder will provide details of the proposed design and layout for the licence infrastructure. Where a licence holder is preserving a project design envelope, this should be reflected in the content and parameters presented in the design notification.

The design notification will set out the licence holder's processes for concept selection and progressing the design and detailed engineering for the **offshore infrastructure project**¹⁰. When selecting a type of licence infrastructure, the licence holder must clearly demonstrate the design options analysis process used to select the type of infrastructure with consideration for safety, infrastructure integrity risks, and in the context of environmental management obligations under the EPBC Act.

The licence holder is required to identify and evaluate in the design notification any aspect of the proposed design of licence infrastructure that may be inconsistent with the description of the project design proposed at the licence application stage.

When addressing the requirements of the design notification scheme, the licence holder should be mindful of any interface between details set out in a design notification and those provided in environmental assessment and approvals documentation (if an environmental approval decision is not yet made) and ensure the design notification does not include information that may be incompatible with any existing EPBC Act obligations, particularly where those obligations have been established as conditions of an environmental approval granted prior to submission of a design notification.

The OIR recommends that a design notification be laid out consistent with the sequence and headings shown in **Attachment 1**. The design notification content requirements align with the Exposure Draft of the OEI Regulations but have been re-sequenced at Attachment 1 to align with likely project stages more closely.

Note: Further information about the design notification submission requirements will be addressed in separate guidance following finalisation of the relevant regulations.

¹⁰ See section 8 of the OEI Act

6.5. Design assurance

Design assurance encompasses a diverse range of technical quality review procedures, spanning from fundamental quality assurance and peer review to independent third-party conformity assessments. Throughout the design phases, the assurance process must demonstrate the licence holder's ability to identify and manage project-related risks. This includes outlining the mitigation measures implemented to manage these risks and ensuring ample assurance for every stage of the offshore infrastructure project.

Where possible, the project design will refer to relevant industry standards (domestic and international) and how they have been applied to the design.

The management plan will need to describe the measures for assuring that the relevant structures, equipment, and property are fit for their function for use in both normal operating and emergency conditions. Given the potential for design activities to occur in advance of the management plan being submitted, reviewed, and approved by the OIR, the licence holder should describe the assurance measures for the design activities within the design notification.

The assurance measures described by the licence holder should give due regard to the nature, scale and complexity of the offshore infrastructure project. Subject to the content of the regulatory advice statement (RAS), those same assurance measures should be reflected in the licence holder's management plan submission.

6.6. Administration of the design notification scheme

The OIR will consider the design notification and will endeavour to give feedback to the licence holder on the design notification within 60 days. If at any time while considering the design notification the OIR is not satisfied the design notification contains sufficient information, the OIR may request further information from the licence holder.

It is important to note that the OIR does not approve or refuse to approve the design notification. The OIR considers the information submitted and provides feedback to the licence holder on the design notification in the form of a RAS.

During the consideration process, the OIR aims to thoroughly address questions, concerns, and issues, providing constructive feedback to the licence holder.

It is important to acknowledge that the licence holder will usually possess a deeper understanding of the project's internal and external context and has more comprehensive information regarding the design compared to the OIR.

Licence holders are encouraged to consider the feedback on the design notification within this broader contextual understanding.

Refer to **Figure 2** for an overview of the design notification process.

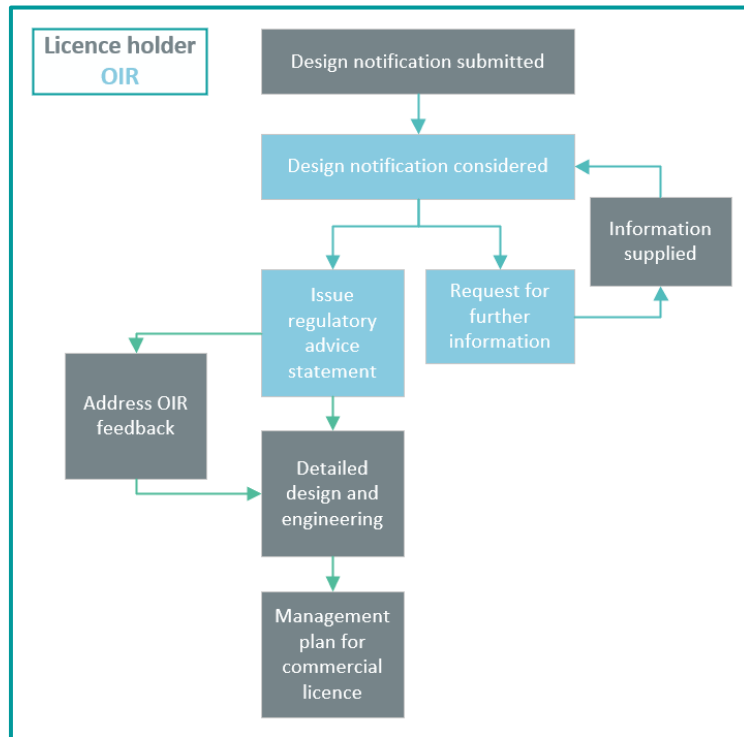


Figure 2 – Design notification process

6.7. Design notification interaction with the management plan

The licence holder should consider the content of the RAS in the preparation of the subsequent design stages and the management plan for the licence, noting that the licence holder will be required to describe how any feedback provided by the OIR has been addressed in the subsequent management plan for the licence. Refer to **Figure 3**.

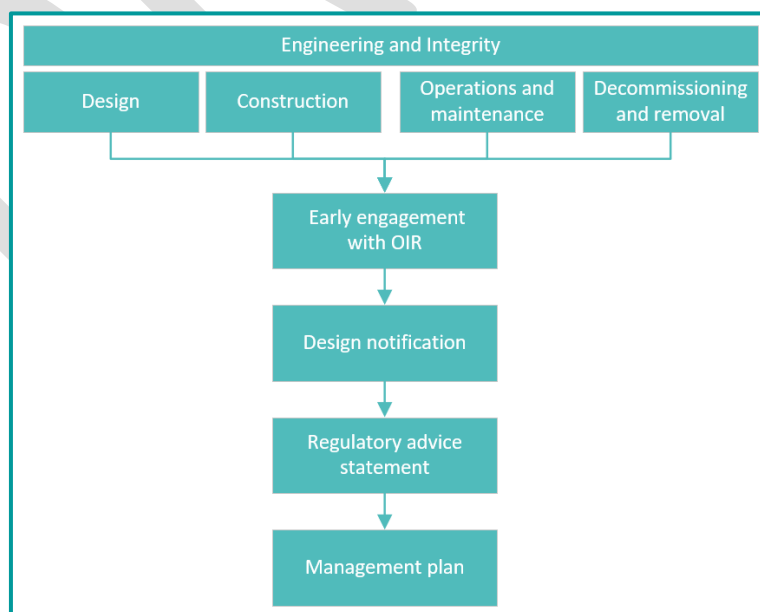


Figure 3 – Interface between the design notification and management plan

Attachment 1

Item	Description – A design notification must
1	Include a plan of the intended location or locations and the layout of the licence infrastructure
	<p>The design notification should include a plan of the licence area showing the intended location(s) and layout of the licence infrastructure. The plan should be at a suitable size and scale, with a scale bar, legend, co-ordinates, information captions and labels as required in legible fonts.</p> <p>The plan should identify the following:</p> <ul style="list-style-type: none"> • the licence area • the location of any meteorological and oceanographic monitoring sites (both past and current) within the licence area • the location of any geotechnical sampling sites within the licence area • the location of the proposed infrastructure (e.g. foundations, anchor arrangements, offshore substations, wind turbine generators, inter-array cables, export cables etc.) • the location of known site constraints (e.g. existing infrastructure, underwater cultural heritage, navigation channels, environmentally sensitive areas, unsuitable ground conditions etc.). <p>Note: Coordinates should be provided in GDA94 geodesic latitude-longitude</p>
2	Include descriptions of the reasonably foreseeable meteorological and oceanographic conditions to which the licence infrastructure may be subject
	<p>The design notification should describe the meteorological and oceanographic conditions to which the licence infrastructure may foreseeably be subject, including details and the location(s) of any monitoring sites within the licence area.</p> <p>The description should include but is not limited to the following:</p> <ul style="list-style-type: none"> • the type of equipment used to determine the metocean conditions • the duration of the campaign and why it was sufficient to adequately characterise the metocean conditions • a detailed description of wind profile, ocean wave heights and direction, oceanic current profiles, meteorological data, and water level • description of how the results from the metocean campaign have been analysed and how the results compare to initial desktop modelling. <p>The description should provide further detail and/or context to the information included in the plan under item 1.</p> <p>Note: Industry standard naming conventions and definitions should be used when describing site conditions. Where possible the descriptions should include a graphical presentation of data and tables.</p>
3	Include descriptions of the seabed and subsoil at the intended location or locations of the licence infrastructure
	<p>The design notification should describe the ground conditions at the intended location(s) of the licence infrastructure, including details and the location(s) of any sampling sites within the licence area.</p> <p>The description should include but is not limited to the following:</p>

	<ul style="list-style-type: none"> • the bathymetry • a detailed description of the ground conditions • a detailed description of any geohazards (e.g. seismic activity, slope instability, variable soil conditions, sediment mobility etc.) • the suitability of the ground conditions intended for licence infrastructure and activities. <p>The description should provide further detail and/or context to the information included in the plan under item 1.</p>
4	<p>Explain the process used to select the design of the licence infrastructure</p>
	<p>The design notification should explain the process for the following:</p> <ul style="list-style-type: none"> • how the site and infrastructure layout has been selected • how considerations relevant to environmental management and protection, including any obligations under the EPBC Act, have been considered. This should include an explanation of steps taken or to be taken to ensure that outcomes of the DN options analysis process remain consistent and compatible with outcomes of environmental assessment and approvals processes • how design parameters, methodologies, key assumptions, and standards have been applied • how requirements associated with other regulatory regimes relevant to the licence infrastructure and the associated construction, operation, maintenance, decommissioning and removal activity have been applied to the design process • how consideration of the risk to the health and safety of workers informed through consultation has been applied to the design process • how the consideration of other marine users informed through consultation has been applied to the design process • how new or emerging technology has been selected and the technology readiness level or maturity of the technology under consideration (if technology is not commercially available) • the details of the technologies (concepts) considered for the licence infrastructure including reasons why certain technology was rejected • the details of the design options analysis undertaken to select the licence infrastructure • the details of the technology selected and how the above has been considered during the design options analysis process • the selected or preferred suppliers of major infrastructure components. <p>Noting that there may be matters that the licence holder is unable to address within the design notification, in this case, the licence holder should describe the process for how:</p> <ul style="list-style-type: none"> • unresolved design activities relating to the health and safety of workers, environmental considerations and infrastructure integrity identified within the design notification will be progressed • project design envelopes will be progressed to ensure the management plan requirements for a listing of the relevant structures, equipment and property and the associated financial security provisions will be met.
5	<p>Include descriptions of how the licence infrastructure will be constructed</p>
	<p>The design notification should describe how the planned licence infrastructure will be constructed.</p> <p>The description should sufficiently detail the primary construction methods and equipment for the licence infrastructure which may include but not be limited to the following components:</p> <ul style="list-style-type: none"> • power generation plant including the associated foundations, moorings and anchors • electricity gathering infrastructure (inter-array cables, substations etc.)

	<ul style="list-style-type: none"> • electricity transmission infrastructure (export cables, substations etc.) • cable installation, burial, protection and/or stabilisation • the types of vessels and equipment required • the safe construction of the licence infrastructure (lifting, towing, drilling, component assembly etc.) • the safe construction of infrastructure in terms of methods, sea state and wind speed.
6	Include descriptions of how the licence infrastructure will be operated and maintained
	<p>The design notification should describe the operation and maintenance strategy of the planned licence infrastructure.</p> <p>The description should be sufficiently detailed to allow the OIR to identify the methods used to operate and maintain the licence infrastructure which may include but not be limited to the following:</p> <ul style="list-style-type: none"> • the foreseeable scheduled maintenance for the licence infrastructure with details of the type and frequency of activities and whether these can be completed in situ or if they require the licence infrastructure to be moved outside of the licence area • the types of unscheduled maintenance activities that may arise during the operational phase of the project and whether these can be completed in situ or if they require the licence infrastructure to be moved outside of the licence area • the types of vessels and equipment required for the scheduled and unscheduled activities • other methods of transport such as helicopter operations • the safe access of infrastructure in terms of methods, sea state and wind speed • the planned monitoring of the licence infrastructure (e.g. SCADA, condition monitoring etc.) • the planned operational life of the licence infrastructure.
7	Include descriptions of how the licence infrastructure will be decommissioned and removed
	<p>The design notification should address the decommissioning and removal of the licence infrastructure at the end of its operational life, by describing:</p> <ul style="list-style-type: none"> • the intended decommissioning and removal, recycling and/or repurposing methodology of all licence infrastructure and how this has been accounted for within the proposed design • the design elements of the licence infrastructure required to support the intended decommissioning and removal methodology. • the safe removal of the licence infrastructure (lifting, loading, towing, etc.). <p>Note: the decommissioning and removal of licence infrastructure should plan for the full removal of all infrastructure</p>
8	Include descriptions of any significant risks or hazards that may arise from the location or locations, design, construction, operation, maintenance, decommissioning or removal of the licence infrastructure
	<p>The design notification should describe any significant risks or hazards that may arise from the design or location of the licence infrastructure and execution of the offshore infrastructure project.</p> <p>When assessing the hazards or risks to the health and safety of workers, the environment and infrastructure integrity, the licence holder should give due consideration to:</p> <ul style="list-style-type: none"> • the location of the licence area and co-existence with other marine users • the local environment • metocean conditions within the licence area • seabed hazards (both naturally occurring and introduced) within the licence area

	<ul style="list-style-type: none"> operations associated with the construction, operation, maintenance, decommissioning or removal of the licence infrastructure.
9	<p>Include descriptions of proposed mitigation measures to deal with those risks and hazards</p>
	<p>In relation to the risks and hazards identified in item 8, the design notification should describe the mitigation measures identified and how they will be implemented to ensure that the licence infrastructure is designed, constructed, operated, maintained, decommissioned, and removed to eliminate or mitigate hazards and risks so far as is reasonably practicable.</p> <p>Notwithstanding the above, the design notification should describe how the licence infrastructure will incorporate access and emergency response considerations for the workforce and other marine users at the location (noting that these can be permanently affected by design or layout decisions) which includes:</p> <ul style="list-style-type: none"> the access provisions during all phases of the offshore infrastructure project and how these provisions have been accounted for in the design of the licence infrastructure and the planning of the offshore infrastructure project the emergency response provisions during all phases of the offshore infrastructure project and how these provisions have been accounted for in the design of the licence infrastructure and the planning of the offshore infrastructure project. The design notification should include an assessment as to the credibility of the nominated emergency response provisions (i.e. search and rescue resources). <p>Note: The licence holder should present their process for detailing and mitigating project risks.</p>

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