

# Impact Analysis Statement

<b>Lead department</b>	Office of Industrial Relations
<b>Name of the proposal</b>	Remake of the <i>Construction and operation of solar farms Code of Practice</i>
<b>Submission type</b>	Summary IAS – Sunset Review
<b>Title of related legislative or regulatory instrument</b>	<i>Construction and operation of solar farms Code of Practice 2024</i>
<b>Date of issue</b>	April 2024

## What is the nature, size and scope of the problem? What are the objectives of government action?

### Safety risks at solar farms

A solar farm is a large scale electrical generating system comprising of photovoltaic (PV) modules and associated electrical infrastructure. For the purposes of the *Construction and operation of solar farms Code of Practice 2019* (the Solar Farm Code), a solar farm is considered to have a system rating of at least 100kW and is, or will be, operated and maintained by a person conducting a business or undertaking.

Electrical safety risks present at these workplaces include electric shock, arc flash, electrical burns, explosion and risk of injury from damage to the solar farm. Some of the other safety risks associated with the workplace also can include falls from heights and trip hazards, mechanical hazards, and remote or isolated work.

Queensland's *Work Health and Safety Act 2011* (WHS Act) and *Electrical Safety Act 2002* (ES Act), and resulting subordinate legislation, impose duties and requirements to eliminate and minimise these risks.

### Development of the Solar Farm Code

Significant reductions in the cost of photovoltaic (pv) module technology combined with government policy and investment in renewable energies has resulted in the rapid emergence of the large-scale solar farm industry in Queensland. Government determined in 2018 to develop a code of practice to provide guidance to industry in light of concerns that new entrants to the market were often operating with a lack of awareness of existing safety requirements.

The Solar Farm Code was approved as a code of practice under the WHS Act and ES Act on 8 April 2019. Whilst the WHS Act and ES Act provide an overarching framework that applies to solar farms, the Solar Farm Code provides this information in a consolidated format. This is intended to be in an accessible format that advises duty holders on these legislative obligations and how they apply in practice for solar farms.

The Solar Farm Code has only been varied and amended once in 2019 as a consequence to an amendment to the *Electrical Safety Regulation 2013*.

The large-scale solar farm industry in Queensland is continuing to grow. As of February 2024, there are approximately 131 solar farms with a generating capacity greater than 1,000kW operating, publicly announced or under construction in Queensland.<sup>1</sup>

### Operation of the Solar Farm Code

The Solar Farm Code was developed in close consultation with industry. With the growing development, interest and new entrants into the industry the Solar Farm Code continues to appropriately reflect the requirements under the work health and safety and electrical safety legislative frameworks.

### Sunsetting of the Solar Farm Code

Under section 274(4C) of the WHS Act, codes of practice expire five years after approval, whereas codes of practice made under the ES Act expire 10 years after commencement (section 44(5) ES Act). The Solar Farm Code is subject to the expiry provision under the WHS Act and will automatically expire on 7 April 2024.

Reviews of codes of practice can take various forms, including a desktop or internal review, with more fulsome reviews required if there have been substantial changes in the relevant industry.



## **Reviews of Queensland's *Work Health and Safety Act* and *Electrical Safety Act***

In 2021 and 2022 respectively, the ES Act and WHS Act were subject to independent reviews of their respective safety frameworks. The *Review of Queensland's Electrical Safety Act 2002* (ES Act Review) resulted in 83 recommendations, and the *Review of the Work Health and Safety Act 2011* (WHS Act Review) in 31 recommendations.

Government has begun implementing recommendations from the reviews, demonstrated by the introduction of the Work Health and Safety and Other Legislation Amendment Bill 2023.

Further, recommendations from the ES Act Review were subject to consultation from the Discussion Paper and Final Report in May 2023. From the consultation, and further policy and economic analysis, Government has determined to progress changes to the electrical equipment and electrical installation definitions. These changes will impact the Solar Farm Code. Further, outcomes from the consultation determined that a working group would give further consideration to the electrical work definition in the ES Act, which may also ultimately impact the Solar Farm Code.

As government is actively considering and implementing recommendations from both reviews, it is anticipated that, once implementation is complete, the Solar Farm Code will require consequential review and amendment.

### **What options were considered?**

#### Option 1: Allow the Solar Farm Code to expire

Under this option, the Solar Farm Code would not be reviewed or remade and would simply be allowed to expire under the WHS Act. Beyond 7 April 2024 the Solar Farm Code would only be approved under the ES Act as opposed to both Acts.

Crucially, the WHS Act requires a person conducting a business or undertaking to comply with a Code of Practice or comply in a manner that is equivalent or higher than the standard in the Code of Practice. However, this requirement under the WHS Act to comply with approved Codes of Practice or achieve an equivalent standard of safety by an alternative means, would not apply to the Solar Farm Code if it expires.

#### Option 2: Remake the Solar Farm Code with minor amendments following a limited internal review

Under this option, the Solar Farm Code would be remade with minimal amendments focused on ensuring technical accuracy and readability (such as fixing spelling and grammatical errors, updating any outdated or incorrect technical information and updating incorrect references to technical documents). This option would ensure the current health and safety standards remain in place for the solar farm industry.

Following implementation of recommendations from the recent reviews of the WHS Act and ES Act, a more fulsome review of the Solar Farm Code, including targeted consultation where applicable, will occur.

#### Option 3: Remake the Solar Farm Code with amendment following a comprehensive review

Under this option, the Solar Farm Code would be comprehensively reviewed and remade. However, as the implementation of the WHS Act Review and ES Act Review is incomplete and the effects of same on the Solar Farm Code are not yet known, the Code would likely need to be subjected to another comprehensive review in the future. This duplicative process would be highly inefficient and involve a larger number of resources to complete two reviews in a short period of time.

### **What are the impacts?**

#### Option 1: Allow the Solar Farm Code to expire

Under this option, the Solar Farm Code would only be approved under the ES Act, not the WHS Act. Practically the requirement under the WHS Act, to comply with approved codes of practice or achieve an equivalent standard of safety by an alternative means, would no longer apply.

#### Option 2: Remake the Solar Farm Code with minor technical amendments following a limited internal review

This option remakes the Solar Farm Code, rather than letting it expire. This will ensure:

- safety requirements across the work health and safety and electrical safety frameworks are clear for the solar farm industry;
- safety standards are current and maintained; and
- Queensland businesses, workers and community continue to benefit from clear, enforceable guidance from the Solar Farm Code.

#### Option 3: Remake the Solar Farm Code with amendment following a comprehensive review

Under this option, the Solar Farm Code would be remade and not allowed to expire. The Solar Farm Code would be subjected to a comprehensive review before its remaking, however, it is likely the updated Solar Farm Code

would again need to be reviewed following the implementation of the ES Act Review and WHS Act Review recommendations. Performing two reviews in a short period of time would have significant resourcing impacts on government, likely lead to stakeholder dissatisfaction and lead to potential inconsistencies between the remade Solar Farm Code and recommendations from the ES Act Review and WHS Act Review.

**Who was consulted?**

Solar Farm Code – 2019

The Solar Farm Code was informed by a working group which was comprised of representatives of workers, industry and government. Those on the working group included Powerlink; National Electrical and Communication Association; Master Electricians Australia; Department of Natural Resources, Mines and Energy; Energy Queensland; Electrical Trades Union; the Construction Forestry Maritime Mining Energy Union; and the Commissioner for Electrical Safety. Further targeted consultation occurred with the Australian Industry Group; Clean Energy Council; Smart Energy Council; Services Union; Board of Professional Engineers Queensland; and Professionals Australia.

Solar Farm Code – 2024

The intent of Option 2 is to undertake targeted consultation with industry, registered unions and relevant experts when the Solar Farm Code is reviewed after the implementation of the reviews of the WHS Act and ES Act. The Office of Industrial Relations has concluded that it would not have been proportionate, constructive or appropriate to seek consultation on a remake of the Solar Farm Code at this time (per Option 3), and then seek the same level of engagement and input for a second review process shortly after.

As part of the limited internal review, internal technical areas provided insight to ensure the technical accuracy of the remade Solar Farm Code.

**What is the recommended option and why?**

Option 2 is the recommended option. This is because:

- this will ensure that workplace health and safety and electrical safety standards are maintained in the solar farm industry; and
- the Solar Farm Code will need to be further reviewed and amended following implementation of recommendations from the recent reviews of the WHS Act and ES Act.

For the above reasons, it is recommended that the Solar Farm Code be remade, with minor amendments to ensure technical accuracy and readability (examples of amendments include fixing spelling and grammatical errors, and ensuring accuracy of links, references to technical documents and other technical information).

**Impact assessment**

	First full year	First 10 years
Direct costs – Compliance costs <sup>2</sup>	Nil	Nil
Direct costs – Government costs <sup>3</sup>	Nil	Nil

Signed



Graham Fraine  
 Director-General  
 Department of State Development and  
 Infrastructure

Date: 22/3 / 2024



The Honourable Grace Grace MP  
 Minister for State Development and  
 Infrastructure  
 Minister for Industrial Relations and  
 Minister for Racing

Date 27/03/2024

<sup>2</sup> All compliance costs are assessed as zero. Queensland's approved codes of practice provide a minimum standard of compliance with the existing requirements of Queensland's work health and safety, and electrical safety legislation. As such, complying with an approved code of practice does not result in an additional cost impact to industry above the existing cost of compliance with the relevant legislation.

<sup>3</sup> All Government costs are assessed as zero. All compliance activities (e.g., industry audit campaigns, inspector visits, inspector training) related to an approved code of practice are not assessed as an additional cost to government, as the regulator does undertake similar activities in relation to the existing requirements of Queensland's work health and safety, and electrical safety legislation.