



Australian
Industry and
Skills Committee

UEG GAS SUPPLY INDUSTRY SKILLS

Case for Change

Name of allocated IRC: Gas IRC

Name of the SSO: Australian Industry Standards

1. Administrative information

For a list of the products proposed to be reviewed as part of this project, please see Attachment A.

Name of IRC(s): Gas IRC

Name of SSO: Australian Industry Standards

1.1 Name and code of Training Package(s) examined to determine change is required

UEG Gas Industry Training Package

2. The Case for Change

For information on the job roles to be supported through the proposed qualifications updates, enrolments data, completion rates, and the number of RTOs delivering these qualifications please see Attachment B.

2.1 Rationale for change

This Case for Change proposes the review of five qualifications and 73 Units of Competency in the UEG Training Package to address current industry practices, new technologies and regulations.

Many changes to work methodologies and new technologies have taken place in the Gas Industry. In response to changes in the Gas Industry, regulatory requirements, particularly around safety practices, are continually being updated.

With the introduction of new technologies and work practices, job roles are adapting to new work functions, allowing cross skilling between roles and increasing workforce mobility. The traditional pipeline technician or operation roles are now blending with gas processing or storage roles, which will need to be reflected in the qualifications. Traditional operation and supervisory roles will also require added skills around the use of automation and digital technology.

Without updating the relevant occupational skills standards contained in this Training Package to align with current industry practice, workforce development and the integration of new technology and hydrogen to existing gas networks and supply will be hindered. This will impact the gas supply industry's alignment with the National Hydrogen Strategy and its ability to support the achievement of energy security in Australia.

This Case for Change also includes the review of two reinstated Units of Competency, as directed by the AISC:

- UEGNSG611 - Control LPG storage/processing operations
- UEGNSG612 - Supervise technical operations for liquefied petroleum gas storage and processing

These Units of Competency were deleted in April 2021 due to low enrolment. Following industry representation, the AISC agreed to their reinstatement on the proviso that they be included for review in the forthcoming Case for Change to determine:

- The specific job roles and purposes for which the LPG-specific units are require, including the numbers of employees occupying these roles and an outline of any requirement for ongoing training.
- Why alternative or archived Units of Competency are not sufficient for the above job roles and purposes; and
- Planned approaches by the Gas IRC and industry stakeholders to encourage and ensure future enrolments in these units for the primary purpose of nationally recognised training.

The Qualifications and Units of Competency proposed for this project have not been updated since 2012. In 2018 they were transitioned to the 2012 Standards for Training Packages as part of UEG Training Package Release 1.0. This Case for Change includes two Units of Competency that were created or updated in the last 12 months that will be impacted by the review. These units will not be reviewed but will require re-coding and endorsement following the review of their pre-requisite units. These Units of Competency will be indicated by asterisks (*) in attachment A.

2.2 Evidence for change

The need to review the qualifications and Units of Competency was identified by the Industry Reference Committee (IRC), industry enterprises, peak bodies, and Registered Training Organisations through various consultations.

A report titled *Preparing Australia's future oil and gas workforce*, commissioned by National Energy Resources Australia, states that further job growth is likely if the industry embraces opportunities around renewables and carbon capture, as well as other forms of unconventional energy to complement existing oil and gas extraction methods. Moreover, it is expected that technological progress will cause new jobs to emerge in roles focusing on technology supervision, maintenance, data evaluation and training.

In its *2021 Gas Statement of Opportunities (GSOO)*, Australia Energy Market Operator states that as traditional sources of gas supply continue to decline, the reliance on gas pipelines and storages has been increasing, and this trend is forecast to continue. Storage facilities provide additional flexibility to help meet maximum demand requirements by storing surplus to achieve energy security.

COAG Energy Council's *2019 Australia's National Hydrogen Strategy* proposes that Australian governments and industry work together to ensure Industry Reference Committees are reviewing, updating and developing qualifications and Units of Competency, as hydrogen is now relevant to Gas industry sectors and skills standards need to be updated accordingly to keep pace with developing hydrogen job roles.

Industry intelligence indicates an urgent need for the introduction of hydrogen specific skills. Jemena has reported that during the development of the Western Sydney Green Gas project, workers with generic gas skill sets were used but that those skills required supplementation for both safety and competence. It was also found that Hydrogen behaved in a manner very different to other gases and that a basic awareness is the bare minimum requirement across the entire industry, moving to an expert knowledge depending on the job role. ATCO indicated that it had a similar experience with Hydrogen projects at its Clean Energy Innovation Park in Jandakot WA. Jemena alone has a further eight hydrogen permits as well as the ongoing operation and maintenance of its existing facilities. Such specific examples highlight the existing and rapidly growing need for hydrogen specific competency within the gas industry.

Data from the National Skills Commission (NSC) shows that the qualifications included in this Case for Change have higher than average demand. These qualifications and their Units of Competency have not been reviewed since last transition to the new template in 2018. These Training Package products need to be reviewed to incorporate new changes in technologies, work practices and regulatory requirements.

Review of Reinstated LPG units

UEGNSG611 Control LPG storage/processing operations – this unit enables an understanding of risk controls (preventative and mitigating) used to manage the safe storage and processing of LPG and ensuring those controls are in place, applying where required, validating their effectiveness and responding appropriately to unplanned events, alarms and emergencies. It is designed for supervisors or operators of LPG plant and equipment at an LPG terminal or depot, including tanker operators, terminal operators/attendants and terminal leading hands/ supervisors/ managers.

There are currently about 800 workers in these roles in Australia and around 600 in Asia Pacific countries, where Australian LPG organisations operate.

UEGNSG612 Supervise technical operations for LPG storage and processing – this unit specifies the skills and knowledge requirements to supervise and monitor LPG storage and processing activities (bulk transfers, cylinder filling, cylinder testing, routine maintenance and inspections, etc.) within the broader context of an LPG terminal work environment, as per legislative requirements. It is designed for workers responsible for the safe operation of the site or who supervise the operation of LPG plant and equipment at an LPG terminal or depot, including terminal operators/attendants and terminal leading hands/ supervisors/ managers. There are currently about 300 people in these roles in Australia and around 200 in Asia Pacific countries.

The LPG industry operates in a heavily regulated environment and has a mandated industry standard (AS/NZS 1596 (2014) The Storage and Handling of LP Gas). The above units will be reviewed and updated to address current industry practices and regulations. ***There are no alternative Units of Competency that can be adopted or imported to replace the existing units*** and meet the specific requirements of the LPG industry and its workforce skill needs.

The Gas IRC will undertake a review of these units in line with the AISC's directive.

2.3 Consideration of existing products

This Case for Change is proposing to review only existing qualifications and Units of Competency.

2.4 Approach to streamlining and rationalisation of the training products being reviewed

The skills and knowledge contained in these qualifications are specific to the Gas Industry. Streamlining or rationalisation of specific content is not possible given the nature of the work functions covered. Consideration will be made during the review of units for portability into other training packages that work with the Gas Industry. The use of imported Units of Competency will be considered for non-specific skills.

3. Stakeholder consultation

3.1 Stakeholder consultation undertaken in the development of Case for Change

For a full list of industry-specific stakeholders that actively participated in the stakeholder consultation process undertaken to develop the Case for Change, please see Attachment C.

The Gas IRC initially identified the need to review these qualifications following consultations with enterprises and training organisations delivering the qualifications.

Development of the Case for Change involved consultation with stakeholders via the following communication mechanisms:

- Stakeholder webinars
- Face to Face meetings (Virtual)
- AIS Website
- Stakeholder networks
- Teleconferences
- Emails

3.2 Evidence of Industry Support

For a list of the issues raised by stakeholders during consultation and the IRC's response to these, please see Attachment D.

Through the consultation process, industry stakeholders, including enterprises and training providers, expressed their support for the proposed work. They acknowledge that the qualifications and Units of Competency are outdated and in need of alignment with current work practices, new technologies, and regulatory requirements.

3.3 Proposed stakeholder consultation strategy for project

Note: For a full list of industry-specific stakeholders who are planned to be contacted to participate in the stakeholder consultation process undertaken for this project, please see Attachment E.

Key Industry stakeholders will be identified in consultation with industry regulators, associations, and the Gas IRC.

A general invitation to participate on the project Technical Advisory Committee (TAC) will be sent to all UEG Gas Industry subscribers. Targeted invitations will also be sent to known technical experts.

AIS, on behalf of the Gas IRC, will promote the opportunity to contribute through stakeholder webinars, the AIS website, EDM's, AIS newsletter and public notifications. Stakeholders will also be notified of key milestones throughout the life of the project, including requests for feedback on draft materials.

Stakeholder engagement and consultation will occur over the life of the project via a combination of the following methods:

- Direct engagement: face to face consultations, phone, emails, video/teleconferencing
- Industry forums and conferences
- Webinars
- Online feedback mechanisms
- STA direct engagement

A range of consultation strategies will be used so stakeholders in rural, regional and remote areas, and in smaller jurisdictions have multiple avenues to provide feedback.

This includes but is not limited to, online/video consultation, email correspondence and promotional activity via targeted communications including social media. A recently developed Engagement hub on the AIS website provides a one stop portal for information about how all stakeholders can participate and inform Training Package development work.

4. Licencing or regulatory linkages

There are currently no licencing requirements contained in these qualifications. However, the qualifications do provide competencies that may require licences in their applications in some contexts, and these units of competency are mostly imported from other training packages. It will be reviewed during the consultation stages as to whether this is still relevant and what the industry needs.

5. Project implementation

5.1 Prioritisation category

It is proposed that this review be progressed as a routine project.

In line with the AISC Prioritisation Report the IRC recommends a routine update and implementation of this project.

5.2 Project milestones

Key project milestones include:

- AISC project approval – August 2021
- Draft 1 consultation – April 2022
- Stakeholder validation – June 2022
- Quality Assurance – July/August 2022
- Final consultation with states and territories – August/September 2022
- CfE submitted for approval – 30 October 2022

5.3 Delivery or implementation issues

Some of the delivery and implementation issues which have been raised by stakeholders include the following:

- The use of weighting points is complicated, and the current allocation of weighting points seems misaligned with the complexity level of the Units of Competency. This project will look at removing weighting points.
- The native Units of Competency need to incorporate new work practices and align with regulatory changes. New technologies that have been adopted by the Gas Industry need to be incorporated into the Units of Competency. Assessment requirements also need to be updated to support better assessment gathering activities. This project will review the associated existing Units of Competency.
- This project will look at the use of imported Units of Competency. Some imported units contained in the existing qualifications are no longer considered relevant. When they are superseded, it can be complicated to update them in the UEG qualifications, particularly if the new units are not equivalent to the old ones.
- Although there has been a recent increase in the uptake of UEG qualifications, the industry needs to attract more use of UEG products. This project will look at shaping and designing the qualifications so that they are more fit for purpose and relevant with industry needs.

6. Implementing the Skills Minister's Priority reforms for Training Packages (2015 and October 2020)

Training delivery information will be provided within the supporting Companion Volume Implementation Guide. Qualifications in the UEG Gas Industry Training Package still adopt a weighting point system which is non-compliant with the 2012 Standards for Training Packages. Removal of weighting points will reduce barriers and allow consumers of the training package informed course choices.

The project will look at shaping and designing the qualifications in a way that they are more fit for purpose and allowing job role movements within the industry or across industry sectors.

This Case for Change does not propose development of new units.

The units in this Case for Change will be updated to align with current practices and regulations. This will impact on the update of existing skill sets. This project will also include industry representatives that will advocate implementation of those units and skill sets.

This Case for Change was agreed to by the Gas IRC

Name of Chair (Acting)

Michael Broomhead

Signature of Chair (Acting)

Date

14 May 2021

Attachment A: Training Package components to change

Australian Industry Standards

Contact details: David Dixon - Chief Operating Officer

Date submitted: 14 May 2021

Note: Units of Competency where the code is marked with * are not being reviewed but contain pre-requisite units that are being updated as part of this project. AIS will update these units as Training Package maintenance function.

Project number	Project Name	Qualification/Unit / Skillset	Code	Title	Details of last review (endorsement date, nature of this update transition, review, establishment)	Change Required
1	Gas Supply Industry Skills	Qualification	UEG20120Y	Certificate II in Gas Supply Industry Operations	21/April/2021 – Deleted Units as per AISC	Update
1	Gas Supply Industry Skills	Qualification	UEG30120Y	Certificate III in Gas Supply Industry Operations	21/April/2021 – Deleted Units as per AISC	Update
1	Gas Supply Industry Skills	Qualification	UEG40220Y	Certificate IV in Gas Supply Industry Operations	21/April/2021 – Deleted Units as per AISC	Update
1	Gas Supply Industry Skills	Qualification	UEG50120Y	Diploma of Gas Supply Industry Operations	21/April/2021 – Deleted Units as per AISC	Update
1	Gas Supply Industry Skills	Qualification	UEG40120Y	Certificate IV in Gas Control Operations	21/April/2021 – Deleted Units as per AISC	Update
1	Gas Supply Industry Skills	Unit	UEGNSG611	Control LPG storage/processing operations	20/Apr/2021 - Deleted	Re-instated

Project number	Project Name	Qualification/Unit / Skillset	Code	Title	Details of last review (endorsement date, nature of this update transition, review, establishment)	Change Required
1	Gas Supply Industry Skills	Unit	UEGNSG612	Supervise technical operations for LPG storage and processing	20/Apr/2021 - Deleted	Re-instated
1	Gas Supply Industry Skills	Unit	UEGNSG330Y	Coat metallic pipelines	05/Sep/2018 - Transition	Update
1	Gas Supply Industry Skills	Unit	UEGNSG331Y	Establish right of way access for transmission pipeline construction	05/Sep/2018 - Transition	Update
1	Gas Supply Industry Skills	Unit	UEGNSG342Y	Maintain pipeline easements	05/Sep/2018 - Transition	Update
1	Gas Supply Industry Skills	Unit	UEGNSG305Y	Coordinate gas transmission pipeline repairs and modifications	05/Sep/2018 - Transition	Update
1	Gas Supply Industry Skills	Unit	UEGNSG310Y	Supervise and monitor contract work	05/Sep/2018 - Transition	Update
1	Gas Supply Industry Skills	Unit	UEGNSG314Y	Liaise with third party and the community to maintain pipeline integrity and community safety	05/Sep/2018 - Transition	Update
1	Gas Supply Industry Skills	Unit	UEGNSG346Y	Launch and recover PIGs in gas transmission pipelines	05/Sep/2018 - Transition	Update

Project number	Project Name	Qualification/Unit / Skillset	Code	Title	Details of last review (endorsement date, nature of this update transition, review, establishment)	Change Required
1	Gas Supply Industry Skills	Unit	UEGNSG347Y	Perform routine maintenance on transmission pipeline facilities and equipment	05/Sep/2018 - Transition	Update
1	Gas Supply Industry Skills	Unit	UEGNSG348Y	Supervise the operation of plant and equipment for the construction of gas transmission pipelines	05/Sep/2018 - Transition	Update
1	Gas Supply Industry Skills	Unit	UEGNSG349Y	Carry out surveillance of gas transmission pipelines	05/Sep/2018 - Transition	Update
1	Gas Supply Industry Skills	Unit	UEGNSG350Y	First response to a gas facility event	05/Sep/2018 - Transition	Update
1	Gas Supply Industry Skills	Unit	UEGNSG352Y	Check and report on gas station conditions	05/Sep/2018 - Transition	Update
1	Gas Supply Industry Skills	Unit	UEGNSG353Y	Carry out aerial surveillance of gas transmission pipelines	05/Sep/2018 - Transition	Update
1	Gas Supply Industry Skills	Unit	UEGNSG354Y	Control excavations in the vicinity of gas transmission pipelines	05/Sep/2018 - Transition	Update
1	Gas Supply Industry Skills	Unit	UEGNSG355Y	Monitor and report on cathodic protection systems	05/Sep/2018 - Transition	Update

Project number	Project Name	Qualification/Unit / Skillset	Code	Title	Details of last review (endorsement date, nature of this update transition, review, establishment)	Change Required
1	Gas Supply Industry Skills	Unit	UEGNSG004Y	Locate, prove and protect utility assets	05/Sep/2018 - Transition	Update
1	Gas Supply Industry Skills	Unit	UEGNSG005Y	Prepare to work in the gas industry	05/Sep/2018 - Transition	Update
1	Gas Supply Industry Skills	Unit	UEGNSG006Y	Use a portable gas detector to locate escape	05/Sep/2018 - Transition	Update
1	Gas Supply Industry Skills	Unit	UEGNSG106Y	Coordinate repair of pipeline, facilities and equipment	05/Sep/2018 - Transition	Update
1	Gas Supply Industry Skills	Unit	UEGNSG108Y	Operate and monitor pipeline control systems	05/Sep/2018 - Transition	Update
1	Gas Supply Industry Skills	Unit	UEGNSG109Y	Control field pipeline operations	05/Sep/2018 - Transition	Update
1	Gas Supply Industry Skills	Unit	UEGNSG110Y	Supervise technical operations for gas distribution or transmission	05/Sep/2018 - Transition	Update
1	Gas Supply Industry Skills	Unit	UEGNSG131Y	Compile a gas industry technical report	05/Sep/2018 - Transition	Update

Project number	Project Name	Qualification/Unit / Skillset	Code	Title	Details of last review (endorsement date, nature of this update transition, review, establishment)	Change Required
1	Gas Supply Industry Skills	Unit	UEGNSG132Y	Carry out basic work activities in a gas industry work environment	05/Sep/2018 - Transition	Update
1	Gas Supply Industry Skills	Unit	UEGNSG133Y	Comply with environmental policies and procedures in the utilities industry	05/Sep/2018 - Transition	Update
1	Gas Supply Industry Skills	Unit	UEGNSG134Y	Establish a utilities infrastructure work site	05/Sep/2018 - Transition	Update
1	Gas Supply Industry Skills	Unit	UEGNSG135Y	Monitor and control gas odourisation	05/Sep/2018 - Transition	Update
1	Gas Supply Industry Skills	Unit	UEGNSG137Y	Operate and maintain gas station water bath heaters	05/Sep/2018 - Transition	Update
1	Gas Supply Industry Skills	Unit	UEGNSG138Y	Install and commission stationary gas fuelled turbine engines	05/Sep/2018 - Transition	Update
1	Gas Supply Industry Skills	Unit	UEGNSG140Y	Apply environmental policies and procedures in the utilities industry	05/Sep/2018 - Transition	Update
1	Gas Supply Industry Skills	Unit	UEGNSG139Y	Repair and maintain stationary gas fuelled turbine engines	05/Sep/2018 - Transition	Update

Project number	Project Name	Qualification/Unit / Skillset	Code	Title	Details of last review (endorsement date, nature of this update transition, review, establishment)	Change Required
1	Gas Supply Industry Skills	Unit	UEGNSG141Y	Apply workplace health and safety regulations, codes and practices in the gas supply industry	05/Sep/2018 - Transition	Update
1	Gas Supply Industry Skills	Unit	UEGNSG142Y	Conduct isolations under the permit to work system for gas industry work sites	25/Jan/2021 - Review	Update
1	Gas Supply Industry Skills	Unit	UEGNSG506Y	Respond to gas infrastructure emergencies	05/Sep/2018 - Transition	Update
1	Gas Supply Industry Skills	Unit	UEGNSG615Y	Fill LPG cylinders	05/Sep/2018 - Transition	Update
1	Gas Supply Industry Skills	Unit	UEGNSG616Y	Refurbish gas cylinders	05/Sep/2018 - Transition	Update
1	Gas Supply Industry Skills	Unit	UEGNSG614Y	Load, unload, exchange and connect LPG cylinders	05/Sep/2018 - Transition	Update
1	Gas Supply Industry Skills	Unit	UEGNSG617Y	Monitor and control the transfer of bulk LPG	05/Sep/2018 - Transition	Update
1	Gas Supply Industry Skills	Unit	UEGNSG618Y	Process liquefied petroleum gas (LPG)	05/Sep/2018 - Transition	Update

Project number	Project Name	Qualification/ Unit / Skillset	Code	Title	Details of last review (endorsement date, nature of this update transition, review, establishment)	Change Required
1	Gas Supply Industry Skills	Unit	UEGNSG619Y	Perform scheduled maintenance on gas processing or storage facilities and equipment	05/Sep/2018 - Transition	Update
1	Gas Supply Industry Skills	Unit	UEGNSG620Y	Organise the repair of faults in LPG processing or storage facilities and equipment	05/Sep/2018 - Transition	Update
1	Gas Supply Industry Skills	Unit	UEGNSG621Y	Control bulk storage of LPG	05/Sep/2018 - Transition	Update
1	Gas Supply Industry Skills	Unit	UEGNSG622Y	Assess the operational capability of gas safety equipment on a delivery vehicle	05/Sep/2018 - Transition	Update
1	Gas Supply Industry Skills	Unit	UEGNSG200Y	Conduct butt fusion of large diameter polyethylene gas pipeline systems	05/Sep/2018 - Establishment	Update
1	Gas Supply Industry Skills	Unit	UEGNSG219Y	Conduct excavations in the utilities industry	05/Sep/2018 - Transition	Update
1	Gas Supply Industry Skills	Unit	UEGNSG221Y	First on site response to gas pipeline emergencies	25/Jan/2021 - Review	Update
1	Gas Supply Industry Skills	Unit	UEGNSG226Y	Assist with the construction, laying and connection of gas distribution services to mains	05/Sep/2018 - Transition	Update

Project number	Project Name	Qualification/Unit / Skillset	Code	Title	Details of last review (endorsement date, nature of this update transition, review, establishment)	Change Required
1	Gas Supply Industry Skills	Unit	UEGNSG227Y	Assist with the construction and laying of gas distribution mains	05/Sep/2018 - Transition	Update
1	Gas Supply Industry Skills	Unit	UEGNSG210Y	Supervise and monitor contract staff for work on distribution pipelines	05/Sep/2018 - Transition	Update
1	Gas Supply Industry Skills	Unit	UEGNSG212Y	Construct, lay and connect a gas distribution service to a plastic main	05/Sep/2018 - Transition	Update
1	Gas Supply Industry Skills	Unit	UEGNSG213Y	Construct, lay and connect a gas distribution service to a steel main	05/Sep/2018 - Transition	Update
1	Gas Supply Industry Skills	Unit	UEGNSG217Y	Launch and recover PIGs in a gas distribution pipeline	05/Sep/2018 - Transition	Update
1	Gas Supply Industry Skills	Unit	UEGNSG218Y	Carry out surveillance on gas distribution assets	05/Sep/2018 - Transition	Update
1	Gas Supply Industry Skills	Unit	UEGNSG222Y	Construct and lay nylon or PVC gas distribution mains	05/Sep/2018 - Transition	Update
1	Gas Supply Industry Skills	Unit	UEGNSG225Y	Perform routine maintenance on distribution pipeline facilities and equipment	05/Sep/2018 - Transition	Update

Project number	Project Name	Qualification/Unit / Skillset	Code	Title	Details of last review (endorsement date, nature of this update transition, review, establishment)	Change Required
1	Gas Supply Industry Skills	Unit	UEGNSG229Y	Prepare simple drawings of as laid gas mains and services	05/Sep/2018 - Transition	Update
1	Gas Supply Industry Skills	Unit	UEGNSG411Y	Maintain cathodic protection systems	05/Sep/2018 - Transition	Update
1	Gas Supply Industry Skills	Unit	UEGNSG412Y	Install cathodic protection systems	05/Sep/2018 - Transition	Update
1	Gas Supply Industry Skills	Unit	UEGNSG706Y	Test new residential and small commercial gas installations	05/Sep/2018 - Transition	Update
1	Gas Supply Industry Skills	Unit	UEGNSG708Y	Pressure test residential and small commercial gas installations	05/Sep/2018 - Transition	Update
1	Gas Supply Industry Skills	Unit	UEGNSG713Y	Investigate billing exceptions-conditions	05/Sep/2018 - Transition	Update
1	Gas Supply Industry Skills	Unit	UEGNSG714Y	Relight Type A gas appliances	05/Sep/2018 - Transition	Update
1	Gas Supply Industry Skills	Unit	UEGNSG804Y	Maintain single stage and single run gas flow and pressure control and measuring devices	05/Sep/2018 - Transition	Update

Project number	Project Name	Qualification/Unit / Skillset	Code	Title	Details of last review (endorsement date, nature of this update transition, review, establishment)	Change Required
1	Gas Supply Industry Skills	Unit	UEGNSG805Y	Maintain multi-stage and multi-run gas flow and pressure measuring and regulating devices	05/Sep/2018 - Transition	Update
1	Gas Supply Industry Skills	Unit	UEGNSG806Y	Maintain SCADA controlled flow and pressure equipment and electronic gas measurement equipment	05/Sep/2018 - Transition	Update
1	Gas Supply Industry Skills	Unit	UEGNSG807Y	Install gas flow, measuring and pressure regulating devices	05/Sep/2018 - Transition	Update
1	Gas Supply Industry Skills	Unit	UEGNSG811Y	Monitor and operate complex flow control, measuring and regulating devices for gas distribution	05/Sep/2018 - Transition	Update
1	Gas Supply Industry Skills	Unit	UEGNSG201Y*	Conduct distribution pipeline emergency repair	25/Jan/2021 - Establishment	Update
1	Gas Supply Industry Skills	Unit	UEGNSG356Y*	Monitor and operate flow control, pressure measuring and regulating devices for gas transmission	05/Sep/2018 - Transition	Update
1	Gas Supply Industry Skills	Unit	UEGNSG113Y	Manage a utilities industry WHS management system	05/Sep/2018 - Transition	Update

Project number	Project Name	Qualification/Unit / Skillset	Code	Title	Details of last review <i>(endorsement date, nature of this update transition, review, establishment)</i>	Change Required
1	Gas Supply Industry Skills	Unit	UEGNSG120Y	Manage gas system environmental compliance	05/Sep/2018 - Transition	Update

Attachment B: Job role, enrolment information, the number of RTOs currently delivering these qualifications

Please set out the job roles to be supported through the updated qualifications, enrolment data over the past three years in which data is available for each qualification, completion rates for each qualification, and the number of RTOs delivering these qualifications.

Job role	Qualification to be updated to support the job role	Enrolment data (for the past three years)	Completion rates (for the past three years)	Number of RTOs delivering (for the past three years)
	UEGNSG330Y Coat metallic pipelines	11	12	13
	UEGNSG331Y Establish right of way access for transmission pipeline construction	0	0	13
	UEGNSG342Y Maintain pipeline easements	60	46	13
	UEGNSG305Y Coordinate gas transmission pipeline repairs and modifications	3	3	13
	UEGNSG310Y Supervise and monitor contract work	5	3	13
	UEGNSG314Y Liaise with third party and the community to maintain pipeline integrity and community safety	0	0	13
	UEGNSG346Y Launch and recover PIGs in gas transmission pipelines	30	23	13
	UEGNSG347Y Perform routine maintenance on transmission pipeline facilities and equipment	15	8	13

	UEGNSG348Y Supervise the operation of plant and equipment for the construction of gas transmission pipelines	4	2	13
	UEGNSG349Y Carry out surveillance of gas transmission pipelines	23	18	13
	UEGNSG350Y First response to a gas facility event	29	21	13
	UEGNSG352Y Check and report on gas station conditions	25	18	13
	UEGNSG353Y Carry out aerial surveillance of gas transmission pipelines	2	2	13
	UEGNSG354Y Control excavations in the vicinity of gas transmission pipelines	54	31	13
	UEGNSG355Y Monitor and report on cathodic protection systems	17	17	13
	UEGNSG004Y Locate, prove and protect utility assets	756	666	13
	UEGNSG005Y Prepare to work in the gas industry	1519	1436	99
	UEGNSG006Y Use a portable gas detector to locate escape	607	580	13

	UEGNSG106Y Coordinate repair of pipeline, facilities and equipment	7	6	13
	UEGNSG108Y Operate and monitor pipeline control systems	3	3	13
	UEGNSG109Y Control field pipeline operations	0	0	13
	UEGNSG110Y Supervise technical operations for gas distribution or transmission	11	9	13
	UEGNSG131Y Compile a gas industry technical report	0	0	13
	UEGNSG132Y Carry out basic work activities in a gas industry work environment	1042	941	13
	UEGNSG133Y Comply with environmental policies and procedures in the utilities industry	771	728	13
	UEGNSG134Y Establish a utilities infrastructure work site	961	875	13
	UEGNSG135Y Monitor and control gas odourisation	2	2	13
	UEGNSG137Y Operate and maintain gas station water bath heaters	0	0	13
	UEGNSG138Y Install and commission stationary	0	0	13

	gas fuelled turbine engines			
	UEGNSG140Y Apply environmental policies and procedures in the utilities industry	1339	1263	13
	UEGNSG139Y Repair and maintain stationary gas fuelled turbine engines	0	0	13
	UEGNSG141Y Apply workplace health and safety regulations, codes and practices in the gas supply industry	1577	1483	99
	UEGNSG142Y Conduct isolations under the permit to work system for gas industry work sites	73	65	13
	UEGNSG506Y Respond to gas infrastructure emergencies	179	178	13
	UEGNSG615Y Fill LPG cylinders	2	2	13
	UEGNSG616Y Refurbish gas cylinders	0	0	13
	UEGNSG614Y Load, unload, exchange and connect LPG cylinders	103	103	99
	UEGNSG617Y Monitor and control the transfer of bulk LPG	0	0	13

	UEGNSG618Y Process liquefied petroleum gas (LPG)	0	0	13
	UEGNSG619Y Perform scheduled maintenance on gas processing or storage facilities and equipment	0	0	13
	UEGNSG620Y Organise the repair of faults in LPG processing or storage facilities and equipment	2	2	13
	UEGNSG621Y Control bulk storage of LPG	0	0	13
	UEGNSG622Y Assess the operational capability of gas safety equipment on a delivery vehicle	0	0	99
	UEGNSG200Y Conduct butt fusion of large diameter polyethylene gas pipeline systems	198	192	13
	UEGNSG219Y Conduct excavations in the utilities industry	673	609	13
	UEGNSG221Y First on site response to gas pipeline emergencies	323	315	13
	UEGNSG226Y Assist with the construction, laying and connection of gas distribution services to mains	23	23	13

	UEGNSG227Y Assist with the construction and laying of gas distribution mains	29	29	13
	UEGNSG210Y Supervise and monitor contract staff for work on distribution pipelines	22	5	13
	UEGNSG212Y Construct, lay and connect a gas distribution service to a plastic main	441	424	13
	UEGNSG213Y Construct, lay and connect a gas distribution service to a steel main	367	350	13
	UEGNSG217Y Launch and recover PIGs in a gas distribution pipeline	23	25	13
	UEGNSG218Y Carry out surveillance on gas distribution assets	20	8	13
	UEGNSG222Y Construct and lay nylon or PVC gas distribution mains	308	287	13
	UEGNSG225Y Perform routine maintenance on distribution pipeline facilities and equipment	144	146	13
	UEGNSG229Y Prepare simple drawings of as laid gas mains and services	50	45	13

	UEGNSG411Y Maintain cathodic protection systems	9	7	13
	UEGNSG412Y Install cathodic protection systems	3	4	13
	UEGNSG706Y Test new residential and small commercial gas installations	2	2	13
	UEGNSG708Y Pressure test residential and small commercial gas installations	13	13	13
	UEGNSG713Y Investigate billing exceptions-conditions	4	4	13
	UEGNSG714Y Relight Type A gas appliances	560	538	13
	UEGNSG804Y Maintain single stage and single run gas flow and pressure control and measuring devices	71	72	13
	UEGNSG805Y Maintain multi-stage and multi-run gas flow and pressure measuring and regulating devices	67	62	13
	UEGNSG806Y Maintain SCADA controlled flow and pressure equipment and electronic gas	2	2	13

	measurement equipment			
	UEGNSG807Y Install gas flow, measuring and pressure regulating devices	40	32	13
	UEGNSG811Y Monitor and operate complex flow control, measuring and regulating devices for gas distribution	45	43	13
	UEGNSG201Y Conduct distribution pipeline emergency repair	0	NA	12
	UEGNSG356Y Monitor and operate flow control, pressure measuring and regulating devices for gas transmission	13	13	13
Gas Industry Worker (Transport), Gas Industry Worker (Cylinder Distribution), Gas Meter Reader, Gas Pipeline Worker, Utilities Industry Worker (Transmission Laying)	UEG20120Y Certificate II in Gas Supply Industry Operations	617	NA	7
Gas Industry Operator (Distribution/Transmission), Gas Industry Operator (Support Services), Gas Industry Operator (Cathodic Protection), Gas Industry Operator (Systems Operations/Pressure Centre)	UEG30120Y Certificate III in Gas Supply Industry Operations	1564	NA	12

Gas Industry Operations Supervisor (Storage/Processing), Gas Industry Operations Supervisor (Control Centre), Gas Pipeline Supervisor, Gas Industry Operations Supervisor (Transmission/Distribution)	UEG40220Y Certificate IV in Gas Supply Industry Operations	1126	NA	8
Gas Technical Officer	UEG50120Y Diploma of Gas Supply Industry Operations	10	NA	0
	UEGNSG113Y Manage a utilities industry WHS management system	0	0	0
	UEGNSG120Y Manage gas system environmental compliance	0	0	0

Attachment C: List of stakeholders that actively participated in the consultation process of the Case for Change

Name of stakeholder	Title	Organisation	Organisation type (e.g. Employer, peak body, union, RTO, regulator)	Jurisdiction/town/city (e.g. NSW/Sydney)
Andrew Tsitas	Senior Project Engineer - Pipelines	Engineering, Technology and Innovation McConnell Dowell Corporation Ltd	Employer	VIC
Ashley Hartnell	Works Practices Specialist	Jemena	Employer	NSW
Geoff Perks	National Training and Development Manager	ELGAS	Employer	ACT
George Pavlou	TWU Organiser	Transport Workers Union (TWU)	Union	VIC
Brian Little	Senior Pipeline Inspector	Energy Safe Victoria	Regulator	VIC
Lindsay Eisemann	LPG Senior Training & Competency Business Partner	Origin Energy	Employer	Brisbane
Michael Broomhead	Training Manager	ATCO Gas Australia	Employer	WA
Robyn Archer	Head of Learning Solutions	APA Group	Peak body	VIC
Shaan Kanteti	Projects Director	AusNet Services	Employer	VIC
Shane Roulstone	National Organising Director	Australian Workers Union	Union	SYD
Sebastian Ross-Hagebaum	Program Manager	Energy Skills Queensland	Peak body	QLD
Jason Van Koll	Director	Enertrain	RTO	VIC
Joe Calabrese	Manager	Enertrain	RTO	NSW

The Case for Change development also involved contacting stakeholders from the following organisational types across all states and territories within Australia as required:

- Industry Reference Committee (IRC) Representatives
- Employers (Non-IRC)
- Peak Industry Bodies
- Unions

- Regulators
- RTOs
- Other/Consultants

Attachment D: Issues Raised by Stakeholders during consultation on the development of the Case for Change

Stakeholder Type	Issues Raised	IRC's Response to Issues Raised
Peak Industry Bodies	Some Imported Units of Competency seem to be irrelevant and do not necessarily support occupational outcomes	Will be addressed during the review of qualifications
Employers (Non-IRC)	The use of weighting points can be complicated. Assessment criteria and performance evidence statement need to be reviewed across training package for better clarity when performing assessment activities	Will be addressed during the review of qualifications
Regulators	Native Units of Competency are outdated, need to align with current practices. Need harmonisation across states and jurisdictions, in relations to standards and work practices.	Will be addressed during the review of Units of Competency
Registered Training Organisations (RTOs)	Qualifications need to allow for job role flexibility and movements across industry sectors	Will be addressed during the review of qualifications
Training Boards/Other	Weighting point allocation is not consistent across the training package	Will be addressed during the review of qualifications, to potentially remove weighting points
State and Territory Training Authorities (STAs)	Qualifications need to properly review inclusion of new units of competency, e.g., Hydrogen, Data Loggers, Storage, in context to the broader intent of the qualifications. Use of pre-requisites need to be reviewed.	Will be addressed during the review of qualifications

Attachment E: List of stakeholders to be contacted as part of the development of the Case for Endorsement

Name of Stakeholder	Title	Organisation	Organisation type (e.g. Employer, peak body, union, RTO, regulator)	Jurisdiction/town/city (e.g. NSW/Sydney)
State Training Authorities		State Training Authorities	State Training Authorities	All States and Territories
Lynette Day	Manager Strategic Projects	Manager Strategic Projects Energy and Technical Regulation Department for Energy and Mining	Govt	SA Also overseeing National Hydrogen Strategy on behalf of COAG
Michael Broomhead	Training Manager	ATCO	Employer	WA
Ashley Hartnell	Works Practices Specialist	Zinfra	Employer	NSW
Brian Little	Energy Safe Victoria	Energy Safe Victoria	Regulator	VIC
Jake Jacobs	Industry Workforce Planner	Energy Skills Queensland	Peak body	QLD
Jason Van Koll	Managing Director	Enertrain	RTO	VIC
Lindsay Eisemann	LPG Senior Training & Competency Business Partner	Origin	Employer	QLD
David Wall	Learning and Development/Technical Training Manager	Jemena	Employer	NSW
Dennis Van Puyvelde	Head of Gas	Energy Networks Australia	Peak body	National
Billy Chan	Senior Engineer	BOC	Employer	National
Lynda Green	Training package content officer	AATIS	Peak body	National
Brett Powell	Systems Specialist - Training and Competency	Origin Energy	Employer	QLD
Bianca Wilson	Business Partner- Training	MPC Kientic	Employer	National
Katie Tunnah	Apprenticeship Program Coordinator	APA Group	Employer	National
Linda Zaldivia	Compliance Manager	Downer	Employer	VIC

Joseph Lynch	Director / Project Manager	Linbeck Contractors	Employer	NSW
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The Case for Endorsement development will also involve contacting stakeholders from the following organisational types across all states and territories within Australia as required:

- Industry Reference Committee (IRC) Representatives
- Employers (Non-IRC)
- Peak Industry Bodies
- Unions
- Regulators
- RTOs
- Other/Consultants