Quality Council for Trades & Occupations
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QCTO SKILLS PROGRAMME DOCUMENT

IN LINE WITH OQSF POLICY (2021) OCCUPATIONAL QUALIFICATION TYPE (NOMENCLATURE)

SKILLS PROGRAMME	SKILLS PROGRAMME ID	TITLE (DESCRIPTOR)	NQF LEVEL	CREDITS
Skills Programme	SP-250302	Power Marketer	6	59

START DATE	END DATE	LAST DATE FOR ENROLMENT	LAST DATE FOR ACHIEVEMENT
27 March 2025	27 March 2030	27 March 2031	27 March 2034

CURRICULUM CODE	900276-000-00

PARTNER DETAILS	ORGANISATION NAME	WEBSITE ADDRESS	TELEPHONE NUMBER	LOGO
QUALITY PARTNER - DEVELOPMENT	Energy & Water Sector Education Training Authority (EWSETA)	https://ewseta.org.za	+27 10 109 3278	EW SETA

Contents

1. QUALIFICATION/PART-QUALIFICATION/SKILLS PROGRAMME DETAILS

1.1 Sub-Framework: Occupational Qualifications Sub-Framework

Occupational Qualification Sub Framework (OQSF)

1.2 Type (Nomenclature):

1.2.1 Specify if this is a Qualification/Part-Qualification/Skills Programme

Skills Programme.

1.2.2 Type: (Nomenclature) e.g., Advanced Occupational Certificate)

Skills Programme

1.3 Title Descriptor:

State the Occupation, Specialisation, context, or Skills Programme context

Power Marketer

1.4 NQF Level:

6

1.5 Credits:

59

1.6. Organising Field and Sub-field:

1.6.1 Organising Field:

Field 06 - Manufacturing, Engineering and Technology.

1.6.2 Organising Sub-Field:

Engineering and Related Design.

1.7 QCTO Curriculum Code:

900276-000-00-00

1.8 Originator/Quality Partner (QP) – Development/Assessment

1.8.1 Quality Partner (Qualifications Development):

Energy & Water Sector Education Training Authority (EWSETA)

1.8.2 Quality Partner (Assessment):

N/A

1.9 Replacement

This qualification replaces:

This Skills programme does not replace an existing skills programme or Unit Standard.

2. RATIONALE

2.1 The need for the Qualification, Part-Qualifications/Skills Programmes

The need for a Power Marketer Skills Programme arises from the critical requirement to effectively facilitate the various components of buying and selling electricity, negotiating contracts between producers and consumers, monitoring market trends and optimising tariff structures between suppliers and clients. This skills programme addresses the need for skilled professionals that are able to analyse the energy demand and supply, assess infrastructure, find renewable energy source solutions to enhance grid reliability and ultimately balance affordability for consumers with financial sustainability for power providers.

2.2 Similar Qualification(s), Part-Qualifications/Skills Programmes

There are currently no similar skills programmes approved by the QCTO.

2.3 Benefit to the sector, society, and the economy:

This skills programme enhances the electricity sector by developing professionals skilled in market optimisation, contract negotiation, and risk management. This leads to greater operational efficiency, cost reductions, and improved reliability in energy supply, driving innovation and competitiveness within the industry.

For society, a skilled workforce in electricity power marketing promotes access to affordable, reliable, and sustainable energy. This contributes to better quality of life, energy security, and support for sustainable development, benefiting communities and overall societal well-being.

Economically, this skills programme supports a more efficient and transparent energy market, encouraging investment in renewable resources and infrastructure. It contributes to job creation, enhances market resilience, and promotes sustainable economic growth by stabilising energy costs and supply chains.

2.4 Typical learners:

Typical learners to this skills programme are engineers, project managers, economists and other relevant occupations already working in the energy sector that want to focus on creating partnerships that will avail and market electricity to an ever-increasing demand for reliable and sustainable energy solutions.

2.5 Relation to Occupation(s) and/or Profession(s)

2.5.1 Occupation(s) related:

2.5.1.1 Collaboration with relevant stakeholders:

- The Skills Programme was developed in consultation with industry experts and the regulator to ensure the minimum legal and regulatory requirements for power marketers are adhered to.

2.5.1.2 List typical occupations in which the qualifying learner will operate (if relevant)

- Power Marketer.

2.5.2 Profession(s) related:

2.5.2.1 Collaboration with relevant stakeholders:

N/A

2.5.2.2 List typical professions in which the qualifying learner will operate (if relevant)

N/A

3. PURPOSE

3.1 Benefit the learners:

The Skills Programme for Power Marketers offers learners an understanding of the electricity market, equipping them with essential skills to facilitate the buying and selling of electricity, negotiate effective contracts between producers and consumers, manage market risks, and optimise tariff structures. This program empowers participants to enhance market efficiency, ensure cost-effective energy procurement, and contribute to the sustainable management of energy resources by bridging the gap between suppliers and clients. It equips learners for a career in the dynamic and evolving energy sector, positioning them as valuable contributors to the energy economy.

3.2 What the qualification or part-qualification intends to achieve:

The purpose of this Skills Programme is to prepare learners to function as Power Marketers.

Power Marketers facilitate the buying and selling of electricity, negotiating contracts between producers and consumers, managing market risks, and optimising tariff structures between suppliers and clients.

A qualified learner will be able to:

- Analyse the energy demand and supply for a specific sector or economic sphere.
- Assess infrastructure for potential participation in power generation initiatives and partnerships.
- Analyse and advise customers and suppliers on the need for energy storage solutions to address intermittency in renewable energy sources and enhance grid reliability.
- Develop and optimise tariff structures and related contracts that balance affordability for consumers with financial sustainability for power providers.

3.3 Typical Graduate attributes

A qualified learner will demonstrate the following key attributes: Market Knowledge, Contract Negotiation Skills, Risk Management, Tariff Optimisation, Regulatory Compliance, Data Analysis and Forecasting, Sustainability Focus, Customer Relationship Management, Strategic Thinking and Technological Proficiency.

4. ENTRY REQUIREMENTS

1. NQF Level 5 qualification.

5. RECOGNITION OF PRIOR LEARNING (RPL)

5.1 RPL for Access to Training:

Learners may use the RPL process to gain access to training opportunities for a programme of learning, qualification, part-qualification, or skills programme if they do not meet the formal, minimum entry requirements for admission.

RPL assessment provides an alternative access route into a programme of learning, qualification, part-qualification, or skills programme.

Such an RPL assessment may be developed, moderated, and conducted by the accredited Skills Development Provider which offers that specific qualification/part qualification/skills programme. Such an assessment must ensure that the learner is able to display the equivalent level of competencies required for access, based on the NQF level descriptors.

5.2 RPL for Exemption:

For exemption from modules through RPL, learners who have gained the stipulated competencies of the modules of a programme of learning, qualification, part-qualification, or skills programme through any means of formal, informal, or non-formal learning and/or work experience, may be awarded credits towards relevant modules, and gaps identified for training, which is then concluded.

5.3 RPL for Access to the External Integrated Summative Assessment (EISA):

Learners who have gained the stipulated competencies of the modules of a programme of learning, qualification, part-qualification, or skills programme through any means of formal, informal, or non-formal learning and/or work experience, may be awarded credits towards relevant modules, and gaps identified for training, which is then concluded.

For a Skills Programme, the accredited Skills Development Provider (SDP) must ensure all modular competency requirements are met prior to the FISA and keep record of such evidence.

Upon successful completion of the FISA, RPL learners will be issued with the QCTO certificate for the qualification, part-qualification, or skills programme. Quality Partners are responsible

for ensuring the RPL mechanism and process for qualifications and part-qualification is approved by the QCTO.

6. RULES OF COMBINATION

6.1 Components:

KNOWLEDGE/THEORY COMPONENT

State compulsory modules:

MODULE CODE	MODULE TITLE	NQF LEVEL	CREDITS	MODE OF DELIVERY
900276-000-00-KM-01	Energy Market Fundamentals.	5	5	BLENDED
900276-000-00-KM-02	Regulatory Environment and Market Design.	6	5	BLENDED
900276-000-00-KM-03	Tariff Structures and Pricing Mechanisms.	6	5	BLENDED
900276-000-00-KM-04	Demand-Side Management and Consumer Engagement.	6	5	BLENDED
900276-000-00-KM-05	Ancillary Services and Grid Management.	6	5	BLENDED
900276-000-00-KM-06	Contract Negotiation and Management.	5	4	BLENDED

Total credits for compulsory knowledge, modules = 29

APPLICATION COMPONENT

PRACTICAL SKILLS MODULE(S)

State compulsory modules:

MODULE CODE	MODULE TITLE	NQF LEVEL	CREDITS	MODE OF DELIVERY
900276-000-00-PM-01	Analyse Energy Market.	6	6	BLENDED
900276-000-00-PM-02	Monitor Regulatory and Market Compliance.	6	4	BLENDED
900276-000-00-PM-03	Conduct Pricing and Risk Management.	6	6	BLENDED
900276-000-00-PM-04	Monitor Demand	6	5	BLENDED
900276-000-00-PM-05	Manage Grid and Ancillary Services.	6	5	BLENDED
900276-000-00-PM-06	Manage and Negotiate Contracts.	5	4	BLENDED

Total credits of the Practical Skills modules = 30

Total credits of the Skills Programme = 59

6.2 Soft Skills Included:

Indicate if 5% -10% of soft skills is included and give location notes on the modules where this is found:

Soft skills are included in the following modules: KM-06 & PM-06.

6.3. Foundational Learning:

N/A

7. EXIT LEVEL OUTCOMES (ELO) AND ASSOCIATED ASSESSMENT CRITERIA (AAC)

7.1 Exit Level Outcomes (ELO) 1:

Apply industry specific methods, procedures and principles to determine the energy demand and supply for a specific sector or economic sphere.

Associated Assessment Criteria (AAC) for ELO 1:

- Historical data, economic indicators and industry trends are analysed to forecast power/electricity demand.
- Traditional power generation, renewable energy, and emerging technologies are evaluated to determine their potential contributions to electricity supply.
- Multiple energy demand and supply scenarios are developed and assessed to evaluate their impact on grid stability and capacity.
- Electricity storage solutions, including their economic viability and integration potential is assessed.
- Energy efficiency is assessed, remedial initiatives are established, and energy budgeting optimisation is considered.

7.2 Exit Level Outcomes (ELO) 2:

Apply industry specific principles and considerations to evaluate and assess the suitability of infrastructure for potential participation in power generation initiatives and partnerships.

Associated Assessment Criteria (AAC) for ELO 2:

- The suitability of existing infrastructure for participation in power generation initiatives is evaluated.
- Potential partnerships are assessed, focusing on infrastructure compatibility and strategic objectives.
- The feasibility, risks, and benefits of adapting infrastructure for power generation projects are critically analysed and documented.

7.3 Exit Level Outcomes (ELO) 3:

Apply key processes, principles and theories to analyse the need for energy storage solutions to address intermittency in renewable energy sources and enhance grid reliability and advise customers and suppliers accordingly.

Associated Assessment Criteria (AAC) for ELO 3:

- The need for grid reliability and related energy storage solutions is determined.
- Different energy storage technologies are evaluated, considering factors such as cost, efficiency, scalability and demand.
- Strategies and suggested business models are developed for incorporating energy storage systems into the overall power portfolio.

7.4 Exit Level Outcomes (ELO) 4:

Evaluate different sources of information related to balancing affordability for consumers with financial sustainability for power providers to develop and optimise tariff structures and related contracts.

Associated Assessment Criteria (AAC) for ELO 4:

- Impact of regulatory changes on tariff structures and financial models are analysed and required adjustments are recommended.
- Power purchase agreements (PPAs) are negotiated with producers/generators/IPPs considering factors such as pricing, contract duration, and performance metrics.
- Funding mechanisms are negotiated, and possible risks are mitigated in compiling regulatory compliant contracts.
- Performance indicators of a contract and obligations of partners and stakeholders are monitored and managed for adherence to terms and conditions, and issues are addressed as they arise during the contract period.

8. INTEGRATED ASSESSMENT

8.1 Formative Assessments conducted internally

Formative assessments are conducted throughout the training of learners. A range of formal, non-formal, and informal ongoing assessment activities are used to focus on teaching and learning outcomes to improve learner attainment.

Formative assessments are conducted continuously by the facilitator to feed into further learning, to identify strengths and weakness, and to ensure the learner's ability to apply knowledge, skills and workplace experience gained.

Formative Assessments are conducted by the accredited Skills Development Provider (SDP), and a variety of ongoing assessment methods may be used, for example, quizzes, assignments, tests, scenarios, role play, interviews. Continuous feedback must be provided.

8.2 Integrated Summative Assessments conducted Internally.

Integrated Assessment involves all the different types of assessment tasks required for a particular qualification, part-qualification, or occupational skills programme, such as written assessment of theory and practical demonstration of competence. To achieve this, the Internal Assessment Criteria (IAC) for all modules as found in the QCTO curriculum document must be followed.

An accredited SDP should implement a well-designed, formal, relevant, final internal Summative Assessment strategy for all modules to prepare learners for the EISA. These assessments evaluate learning achievements relating to the achievement of each module of the relevant components of the qualification, part-qualification, or skills programme.

Internal Summative Assessments are developed, moderated, and conducted by the SDP at the end of each module or after integration of relevant modules, e.g., applied knowledge tests, workplace tasks, practical demonstrations, simulated tasks/demonstrations, projects, case studies, etc.

The results of these final formal summative assessments must be recorded. These results, which include the Statement of Work Experience results, where applicable, contribute to the Statement of Results (SoR) that is a requirement for admission to the EISA. An SoR, using the template provided by the Quality Partner, is issued by the accredited SDP for qualifications and part-qualifications. The SDP must produce a valid Statement of Results for each learner, indicating the final result and the date on which the competence in each module, of each

component, was achieved. Learners are required to produce this SoR, together with their ID document or alternative ID document, at the point of the EISA.

8.3 De-centralised Final Integrated Supervised Assessment (FISA) for Skills Programmes

The FISA is de-centralised, and the assessment standards set by the QCTO must be implemented by the accredited SDP in the development, moderation, and implementation of all FISA for Skills Programmes.

The accredited SDP manages and conducts the FISA and submits learner results for QCTO approval for certification, according to QCTO-required compliance standards.

For entrance into the FISA, the learner must have completed the Skills Programme successfully and be found competent in all modules, recorded internally by the SDP.

8.3.1. Guidelines for Continuous Assessment & Final Integrated Supervised Assessment (FISA)

The following assessments must be conducted by the accredited Skills Development Provider (SDP):

1. Continuous Assessment (throughout the teaching and learning)
2. Final Integrated Supervised Assessment (a final supervised summative assessment at the end)

8.3.1.1. Continuous Assessment:

The continuous assessments must be completed by the SDP throughout the training period in accordance with the outcomes and assessment criteria provided for each module.

This may consist of a variety of methods, e.g. Formative assessments, written assessments, practical assessments, projects, case studies, scenarios, oral assessments, work integrated learning assessment or assessment of simulated application, or any other forms of integrated learning assessment set to assist the learner in the learning process. A variety of methods should be used.

It is mandatory for Summative assessments to take place at the end of modules/topics (or sections) which must be formally recorded and be available for monitoring and/or evaluation by the QCTO.

8.3.1.2. Final Integrated Supervised Assessment (FISA)

This is a final decentralised assessment completed by the accredited SDP under supervised conditions. It is scheduled, developed, conducted, and moderated by the SDP according to the set standards found in the Skills Programme document.

The Final Integrated Supervised Assessment must be clear in what will be assessed, what the learner must be able to do, know, produce, demonstrate, etc. according to the required standards as set in the information provided under "Final Integrated Supervised Assessment" in the Skills Programme document.

The ideal method to be used is a practical assessment in which the learner demonstrates the practical skills mastered, *as well as* the ability to problem-solve. It is not in the format of a Portfolio of Evidence. The format should be a brief / job card / practical task / occupational task which will allow the learner to demonstrate the required skills.

Requirements for the marking rubric or compliance checklist:

i) A marking rubric or compliance checklist must be completed for each learner with the following information clearly stipulated:
   a. Name of accredited Skills Development Provider
   b. Name and ID number of learner
   c. Name of facilitator/assessor
   d. Name of moderator
   e. Date of assessment
   f. List of required competencies and level of achievement, as developed according to the set standards.
   g. Mandatory competencies marked with an (*) – these are compulsory skills required that cannot be compromised even if the learner has proven competency in all other areas, and these are not achieved, the learner will be declared NYC.
   h. Final Competency: C or NYC

ii) It should also allow for the facilitator/assessor to list at least 5 questions that were asked orally of the learner, as well as the recording of the learner's responses, during the process to indicate that embedded knowledge has also been assessed during this Final Integrated Supervised Assessment.

The accredited SDP must ensure the following processes and documentation are completed in order for the QCTO to approve these results for Certification (templates available on QCTO Website):

a) Upload learner information in the format prescribed by the QCTO, **within 5 days** of starting the Skills Programme, also indicating start and end dates, as well as the scheduled date(s) of the FISA.

b) Develop and moderate the FISA according to the standards set for the FISA task, bearing in mind the achievement of the purpose of this skills programme as well as the stipulated ELOs. (The developer should be the facilitator used and is responsible for the continuous and FISA assessment. The moderator should be an SME other than the one who developed the instruments/facilitated the learners).
c) Conduct the FISA under strict examination supervised conditions according to a set date and time. The QCTO may conduct sample monitoring visits on the conduct of the FISA.
d) Complete all relevant sections of the QCTO Verification Report for FISA (QCTO template).
e) Submit captured results (on same spreadsheet used in [a]), as well as above QCTO Verification Report for FISA (QCTO template) to the QCTO **within 21 days of the date of the FISA,** together with a copy of the assessment instrument and marking guideline/compliance rubric used.
f) Upon receipt of the above, the QCTO will request a sample of the completed marking rubric/compliance checklist or answer sheets (if written component was used) for selected learners together with a copy/photos/videos of the learner's evidence before final approval of results. If this request is made, this information must be submitted to the QCTO **within 48 hours.**
g) After approval by the QCTO, results are recommended for certification.

The QCTO reserves the right not to approve results if:

- Learner enrolments are not submitted within 5 days of starting training.
- Results are not submitted within 21 days of the date of the FISA, with all required documentation.
- FISA conducted did not meet the set standards.
- Failure to comply with request from QCTO for any additional evidence.
- SDPs do not comply with these requirements and standards as stipulated herein.

8.3.2. Standards for the Assessments

8.3.2.1. Continuous Assessment:

Continuous assessment will be conducted in the form of exercises, tasks, assignments, and reports/presentations must meet the outcomes of all modules/topics as indicated.

8.3.2.1.1. Assessment Standards for Knowledge Modules:

" Energy Market Fundamentals "

- Provide a detailed comparison of deregulated and regulated electricity markets, assessing their effects on pricing strategies, market competition, and infrastructure investment.

- Assess the impact of deregulated and regulated market structures on stakeholders such as consumers, utility companies, and investors, illustrating how each structure influences their decisions and market behaviour.
- Evaluate how the interactions among spot markets, forward markets, and bilateral contracts affect market efficiency and stability, including their influence on market behaviour and pricing strategies.
- Critically analyse the role of electricity generators within the South African energy market, including their impact on energy supply, pricing, and market competition. Provide specific examples of how generators contribute to and influence market dynamics.
- Analyse the responsibilities of electricity suppliers in South Africa, including their impact on consumer choice and market dynamics, using specific examples from the South African context.
- Assess the role of grid operators in maintaining the stability and reliability of the electricity grid, including their responsibilities in transmission management and coordination among market participants.
- Analyse the function of regulators in the South African electricity market, including their role in market oversight, policy enforcement, and consumer protection. Discuss the impact of regulatory decisions on market stability and fairness.
- Critically assess how the interactions between generators, suppliers, grid operators, and regulators influence market dynamics such as electricity pricing, supply-demand balance, and overall market performance in South Africa.
- Analyse the mechanisms for resolving conflicts between market participants in the South African electricity market, including the roles of regulatory bodies and established dispute resolution procedures.
- Critically evaluate the various analytical techniques used for identifying and interpreting market trends and evaluate their effectiveness in evaluating market behaviour.
- Evaluate the accuracy of the various forecasting models to predict supply and demand dynamics.
- Evaluate how various factors and assumptions impact the supply and demand forecasts and discuss the implications for market strategy.
- Critically assess how data analytics supports decision-making processes and enhances the accuracy of market forecasts.
- Critically analyse the assumptions and limitations of the economic models used to evaluate market conditions and forecasts and explain how they impact the analysis and interpretation of market data.

" Regulatory Environment and Market Design "

- Provide a comprehensive overview of the functions and responsibilities of NERSA, DMRE, RETEC, and relevant supply authorities, including their impact on energy market operations and regulatory compliance.
- Identify and explain the main regulations that govern energy trading and market operations, discussing their effects on market behaviour, trading practices, and overall market stability.
- Critically assess the relevant regulations and by-laws and their influence on operational decisions and compliance requirements within the market.
- Provide a detailed analysis of capacity markets, energy markets, and ancillary service markets, including their operational mechanisms, objectives, and their effects on market efficiency and reliability.
- Describe the role of land use regulations in the development and operation of energy infrastructure and analyse their impact on planning, construction, and operational processes, including considerations related to environmental and community impacts.
- Provide a detailed explanation of the grid components (generation, transmission, and distribution) highlighting their functions and how they interact to ensure a stable and reliable electricity supply.
- Evaluate the methods used for frequency control and voltage support in maintaining grid reliability and stability. Discuss their implementation and significance in ensuring uninterrupted and stable electricity delivery.
- Describe the concept of wheeling, including its operational principles and the regulatory and contractual frameworks involved. Assess its effects on market access, efficiency, and the overall functioning of the electricity grid.

" Tariff Structures and Pricing Mechanisms”

- Describe the nature of fixed tariffs, time-of-use tariffs, and demand charges, including their impact on consumer behaviour and revenue. Provide practical examples of when and why each tariff structure is implemented.
- Evaluate different strategies for optimising pricing and revenue generation, including their effectiveness in managing consumer demand and maximising utility revenue. Provide recommendations based on these strategies.
- Explain how spot prices are calculated and their significance in reflecting current supply and demand. Discuss how these prices impact market decisions and financial results for participants.
- Describe forward prices and their role in energy trading, particularly how they are established through forward contracts and used to manage future price risks. Assess their impact on market participants' planning and strategy.

- Explain what index prices are, how they are determined, and their role in market transactions. Evaluate how they help in standardising contracts and reflecting market trends.
- Identify and evaluate potential arbitrage opportunities in the energy market, explaining how price differences across markets or times can be exploited for profit and the considerations involved in assessing these opportunities.
- Outline the process of conducting a risk assessment for energy trading activities, identifying key risks and recommending effective mitigation strategies to manage these risks and maintain stability in trading operations.
- Explain and assess various strategies and tools for managing price volatility and uncertainty, including their effectiveness in stabilising financial outcomes and reducing market exposure.

" Demand-Side Management and Consumer Engagement”

- Describe the key concepts and goals of demand response programmes, outlining their role in aligning consumer demand with supply conditions and their advantages for grid stability and cost efficiency.
- Identify and assess the characteristics of capacity-based, price-based, and emergency demand response programmes, including their operational mechanisms and objectives for managing demand.
- Describe and assess various techniques for engaging customers in demand response programmes, such as communication methods, incentives, and the use of technology, and evaluate their effectiveness in increasing customer involvement and programme success.
- Explain different energy efficiency technologies and practices, including their uses and advantages, and describe their role in reducing energy consumption and enhancing system efficiency.
- Propose and critically evaluate strategies to promote energy efficiency, including the use of incentives, educational campaigns, and regulatory measures, and assess their effectiveness in increasing adoption rates.
- Describe the methods and processes for reselling surplus electricity and managing energy imbalances, including relevant market and regulatory mechanisms, and evaluate their effectiveness in addressing these challenges.
- Explain power factor issues and management strategies, including techniques for correction and optimisation, and evaluate how improving the power factor can benefit system performance and reduce costs.

" Ancillary Services and Grid Management”

- Explain the roles of frequency regulation, spinning reserves, and non-spinning reserves in ancillary services, highlighting their functions and how they contribute to the stability and reliability of the electricity grid.
- Describe the technical specifications and capabilities required to provide ancillary services and assess how these requirements facilitate effective service delivery and contribute to grid management.
- Describe the mechanisms for procuring and compensating ancillary services in the market, including bidding processes, contracts, and payment structures, and evaluate their effectiveness in ensuring fair compensation and efficient service delivery.
- Identify and explain different grid constraints and congestion management strategies, assessing their effects on grid performance and the methods used to address these issues effectively.
- Describe the essential practices and technologies for maintaining grid reliability and stability, evaluating their role in ensuring continuous service and managing disruptions to support overall grid performance.

" Contract Negotiation and Management”

- Critically evaluate effective techniques for negotiating power purchase agreements and supply contracts, including strategies for securing favourable terms, managing stakeholder interests and addressing potential conflicts. Discuss how these techniques can be applied to secure advantageous agreements and foster long-term relationships.
- Identify and interpret essential contract terms and conditions in power purchase agreements and supply contracts, explaining their implications for contract management and compliance.
- Describe the key principles of effective contract management and compliance, including processes for monitoring obligations, handling changes, and resolving issues, and assess their role in maintaining contract integrity.
- Explain and evaluate the fundamental practices for monitoring and optimising contractual performance, including setting performance metrics, conducting evaluations, and implementing feedback, to enhance contract outcomes and ensure adherence to terms.

8.3.2.1.2. Assessment Standards for Application Modules:

Given real world scenarios requiring analysing energy demand skills:
Be able to:

- Collect and interpret energy consumption data using statistical software (e.g., Excel, R, or Python).
- Use data visualisation tools to identify patterns and trends in energy demand for specific sectors.
- Apply demand forecasting models to predict future energy needs, incorporating factors such as economic growth and technological advancements.

Given real world scenarios requiring identifying market opportunities skills:
Be able to:

- Conduct market research to identify arbitrage opportunities in energy trading.
- Map roles and interactions of key market participants to identify strategic leverage points.

Given real world scenarios requiring navigating regulatory frameworks skills:
Be able to:

- Study and interpret key regulations and by-laws affecting energy markets.
- Develop checklists to ensure compliance with regulatory requirements in market operations.

Given real world scenarios requiring optimising market participation skills:
Be able to:

- Participate in forums and workshops with regulatory agencies to stay informed on policy changes.
- Analyse the impact of regulatory changes on market operations and strategies.
- Inform participants on the application of regulations.

Given real world scenarios requiring developing pricing strategies skills:
Be able to:

- Evaluate different tariff structures and recommend optimisation strategies for revenue generation.
- Conduct price sensitivity analyses to understand the impact of pricing changes on demand and profitability.

Given real world scenarios requiring mitigating financial risks skills:
Be able to:

- Participate in workshops to identify and assess financial risks in energy trading.
- Develop scenarios and conduct simulations to manage price volatility and uncertainty.

Given real world scenarios requiring implementing demand response programmes skills:
Be able to:

- Design demand response programmes tailored to specific consumer segments and market conditions.
- Create and test strategies to engage consumers in demand response initiatives through incentives and education.

Given real world scenarios requiring enhancing energy efficiency skills:
Be able to:

- Conduct energy efficiency audits to identify potential savings and improvement areas.
- Evaluate and implement new technologies to improve energy efficiency in various sectors.

Given real world scenarios requiring supporting grid reliability skills:
Be able to:

- Conduct analyses to identify grid constraints and develop strategies for congestion management.
- Participate in exercises to understand and implement solutions for frequency regulation and voltage support.

Given real world scenarios requiring coordinating grid ancillary services skills:
Be able to:

- Plan and coordinate ancillary service provision to ensure grid stability.
- Work with grid operators to optimise grid reliability and support services.

Given real world scenarios requiring negotiating and drafting energy contracts skills:
Be able to:

- Engage in simulations to practice negotiation tactics for power purchase agreements with stakeholders.
- Analyse existing contracts to identify key terms and conditions and suggest improvements.
- Determine tariff structures and performance metrics.

- Investigate and negotiate funding mechanisms.
- Collaborate with legal teams to ensure contracts comply with regulatory requirements and mitigate risks.
- Formulate the performance indicators of a contract and obligations of partners and stakeholders.
- Compile energy marketing contracts and power purchase agreements.

Given real world scenarios requiring managing contractual relationships skills:
Be able to:

- Develop and utilise tools to monitor contract compliance and performance.
- Participate in workshops to adapt contracts to evolving market conditions and consumer needs.

8.3.2.1.3. Final notes for continuous assessments:

The SDP must ensure that all learners are enrolled with the QCTO at the start of training (within 5 days) in the format required by the QCTO.

Continuous assessments are set by the SDP in accordance with the outcomes provided. This may consist of a variety of methods, e.g. practical or written assessments, assignments, projects, demonstrations, presentations, or any other form of assessment to assist the learner in the learning process.

During training, it is mandatory for formal summative assessments to take place at the end of each module/topic. These results must be formally recorded and be available for monitoring and/or evaluation by the QCTO.

8.3.2. Final Integrated Supervised Assessment (FISA)

All learners gain entrance to the Final Integrated Supervised Assessment by successfully completing all formal summative assessments conducted by the SDP.

8.3.2.2.1. Format of FISA:

The FISA will comprise of a **Written assessment** integrating the relevant Exit Level Outcomes.

All FISAs must be supervised, and virtual FISAs must be recorded throughout the assessment.

All Exit Level Outcomes must be covered in the FISA. In the FISA, the learner must demonstrate applied knowledge and skills to prove that the competencies of the Skills Programme have been achieved.

The FISA may not contain any assessments used in the "Continuous Assessment" process (thus no re-assessment).

Note that a different instrument must be developed and moderated for each FISA according to the standards below.

Special considerations should be made for candidates with special learning needs.

8.3.2.2.2 Standards for Written Final Integrated Supervised Assessment (FISA):

The learners should be provided with real-life scenarios to prove applied competency relevant to the Exit Level Outcomes and the purpose of the Skills Programme. This is the section where the learner must apply relevant knowledge and skills attained (what the learner must be able to do, and to what expected standard).

The **FISA INSTRUMENT** must be developed and moderated by the SDP and conducted in a supervised environment. It is assessed by means of an **INSTRUMENT** and **MEMORANDUM** developed by the SDP for this purpose.

In the **written** component, the learners should be provided with real-life scenarios to prove applied competency relevant to the Exit Level Outcomes and the purpose of the Skills Programme. This is the section where the learner must apply relevant knowledge and skills attained (what the learner must be able to do, and to what expected standard).

The applied knowledge that must be proven for the various ELOs should be:

1. **Applying industry specific methods, procedures and principles to determine the energy demand and supply for a specific sector or economic sphere**:
    - Analyse historical data, economic indicators and industry trends to forecast power/electricity demand.
    - Evaluate traditional power generation, renewable energy, and emerging technologies to determine their potential contributions to electricity supply.
    - Evaluate the impact on grid stability and capacity from multiple energy demand and supply scenarios.
    - Assess electricity storage solutions, including their economic viability and integration potential.
    - Assess energy efficiency, establish remedial initiatives and consider energy budgeting optimisation.

2. **Applying industry specific principles and considerations to evaluate and assess the suitability of infrastructure for potential participation in power generation initiatives and partnerships**:
    - Evaluate the suitability of existing infrastructure for participation in power generation initiatives.
    - Assess potential partnerships focusing on infrastructure compatibility and strategic objectives.
    - Critically analyse and document the feasibility, risks and benefits of adapting infrastructure for power generation projects.
3. **Applying key processes, principles and theories to analyse the need for energy storage solutions to address intermittency in renewable energy sources and enhance grid reliability and advise customers and suppliers accordingly**:
    - Determine the need for grid reliability and related energy storage solutions.
    - Evaluate different energy storage technologies considering factors such as cost, efficiency, scalability and demand.
    - Develop strategies and suggest business models for incorporating energy storage systems into the overall power portfolio.
4. **Evaluating different sources of information related to balancing affordability for consumers with financial sustainability for power providers to develop and optimise tariff structures and related contracts**:
    - Analyse the impact of regulatory changes on tariff structures and recommend financial models and required adjustments.
    - Examine power purchase agreements (PPAs) with producers/generators/IPPs considering factors such as pricing, contract duration, and performance metrics.
    - Assess funding mechanisms and mitigate possible risks in compiling regulatory compliant contracts.
    - Monitor and manage performance indicators of a contract and obligations of partners and stakeholders for adherence to terms and conditions, and address issues as they arise during the contract period.

To respond to challenges/issues/problems in the scenarios above:

a) The assessment should be out of a maximum of 120 marks.
b) The duration of the assessment should be a maximum of 3 hours.
c) Learners must achieve a minimum of 70% in order to be declared competent.
d) No FISA instrument is allowed to be used verbatim for re-assessment or for a different cohort of learners.

A computer-based assessment may be administered so that the above evidence can be created using document processing applications such as word, excel etc.

Learners who complete this skills programme will accumulate credits towards the relevant full or part qualification. The Credit Accumulation and Transfer (CAT) Policy may apply to these learners.

Submission of final results

Final results must be submitted to the QCTO in the required format, within 21 days of the date of the FISA, together with the following:

- Completed Assessment Verification Report on the FISA (QCTO template: relevant sections).
- Learner results spreadsheet
- A copy of the final Assessment Instrument used, as well as the marking guideline / rubric.

10. ARTICULATION

10.1 Articulation for Skills programmes

10.1.1 Work Opportunities:

- Learners successfully completing this skills programme would be employable in the energy sector, for power marketing and related roles.

10.1.2 Learning Opportunities:

- Leaners may further their studies by enrolling in other related energy qualifications, subject to meeting their minimum entry requirements.

11. NOTES

11.1 Additional Legal or Physical Entry Requirements

None

11.2 Criteria for Accreditation

Accreditation requirements, against which Skills Development Providers (SDP) and Assessment Centres, will be accredited, is found in the Curriculum Document, as listed below.

Curriculum Code:

900276-000-00-00

11.3 Encompassed Trades (where applicable)

This is not a trade.

12. ASSOCIATED QUALIFICATION(S)/PART-QUALIFICATION(S):

None