

Technical Education and Skills Development Authority

Webliography

The Webliography is an electronic bibliographic listing of topics related to the qualification titles of a particular TVET priority sector, with pre-searched *URLs* (uniform resource locators) and descriptions (abstracts).

The pre-searched *URLs* provide contents in reference to the title of promulgated Training Regulations (TR). By clicking the weblinks (underlined URLs in blue text), your internet browser will direct you to the website/webpage where you can find the topic related to the title you selected. The Webliography is a useful tool for trainers who are designing and developing competency-based curriculum and learning materials.

TESDA » Webliography » Utilities

INTERNET RESOURCES

❖ What is Utility?

https://en.wikipedia.org/wiki/Utility

This webpage provides the concept and function of Utility. [Retrieved 4 September 2018]

❖ Path to Sustainability: Technology and the Modern Utility

https://www.elp.com/Electric-Light-Power-

Newsletter/articles/2017/11/path-to-sustainability-technology-and-the-modern-utility.html

Today's utility industry is changing rapidly. Energy efficiency, renewable and distributed energy resources, new energy markets and high demand costs are putting great pressure on utilities to find ways to be sustainable.

[Retrieved 4 September 2018]

Utilities Sector

Scope:

The economics of electricity are becoming more complex, requiring new tools as well as cost and pricing concepts to support the transition. Ultimately, these new methods will help define the role of the utility and the services it provides, as well as the design of rates (prices) to recover the cost of providing service. New rate structures will create incentives for customers and utilities that can guide them toward a clean energy economy.

Source:

https://www.energy.gov/sites/prod/files/2017/01/f34/Modernizing%20the%20Electric%20Distribution%20Utility%20to%20Support%20the%20Clean%20Energy%20Economy 0.pdf

List of qualifications:

- Diesel Power Plant Maintenanc NC III
- Diesel Power Plant Operation and Maintenance NC II
- Diesel Power Plant Operation and Maintenance NC III
- Electric Power Distribution Line Construction NC II
- Transmission Line Installation and Maintenance NC II
- Transmission Line Installation and Maintenance NC III

❖ A POLICY FRAMEWORK FOR THE 21st CENTURY GRID: Enabling Our Secure Energy Future

https://www.ferc.gov/industries/electric/indus-act/smart-grid/21st-century-grid.pdf

This report outlines policy recommendations that build upon the Energy Independence and Security Act of 2007 and the Obama Administration's smart grid investments to foster long-term investment, job growth, innovation, and help consumers save money. [Retrieved 4 September 2018]

❖ UTILITIES PLANT OPERATOR Competency Profile

https://ts.hr.ncsu.edu/wp-content/uploads/sites/14/2016/06/util-plant-oper.pdf Employees are responsible for providing operation, maintenance/repair and management of nuclear reactor, boiler, electrical and/or steam turbine driven chillers, cooling towers, auxiliary equipment, gas and/or steam-driven turbines in power plants.

[Retrieved 4 September 2018]

❖ Energy: Advanced Commercial Buildings Competency Model https://www.careeronestop.org/CompetencyModel/competency-

https://www.careeronestop.org/CompetencyModel/competencymodels/Advanced-Commercial.aspx

In collaboration with the Department of Energy Office of Energy Efficiency and Renewable Energy (DOE EERE) and the National Institute of Building Sciences (NIBS)/DOE Better Buildings Workforce Guidelines project, the Consortium for Building Energy Innovation (CBEI) team developed a competency model for the advanced commercial building (ACB) workforce that provides a support system to build a better workforce.

[Retrieved 4 September 2018]

Diesel Power Plant Maintenance NC III

Core Competencies

- Overhaul diesel engine
- Diagnose and repair diesel engine
- Service alternator/ generator
- Diagnose and repair electrical system

INTERNET RESOURCES

❖ Marine and Power Plant Diesel Engine Repairs & Maintenance http://www.goltens.com/diesel-engines/engine-repairs-andmaintenance?gclid=EAlalQobChMI6On4zPGn3QIVB66WCh05gQg3EAAYAS AAEgJYZfD BwE

When your main propulsion engine or diesel generator experiences a casualty, fast access to critical repair minimizes off-hire or lost power production. Either way, our diesel services show up at your bottom line [Retrieved 4 September 2018]

❖ Diesel Engine Troubleshooting and Diagnostics

http://www.goltens.com/diesel-engines/troubleshooting-diagnostics
Goltens on-site diesel engine maintenance capabilities reduce
downtime for marine diesel engines and stationary diesel generators
and our world-class diesel engine

workshops offer reconditioning services for a wide range of critical diesel engine parts.

[Retrieved 11 September 2018]

❖ Engine power plant operation and maintenance

https://www.smartpowergeneration.com/operation-and-maintenance
To meet the electricity demand at all times in the most optimal way, a
power plant should be easy to operate. Wärtsilä's engine-based Smart
Power Generation plants are designed to be simple to operate and
enable smart maintenance planning: fix one engine at the time, and
keep the others running.

[Retrieved 4 September 2018]

❖ Operation and Maintenance of Diesel Power Generating Plants http://www.idc-online.com/downloads/DG IDCBookextract.pdf

IDC Technologies is a specialist in the field of industrial communications, telecommunications, automation and control and has been providing high quality training for more than eight years on an international basis from offices around the world.

[Retrieved 10 September 2018]

❖ Interpret technical specifications and manuals

https://training.gov.au/TrainingComponentFiles/MEM05/MEM16012A R1.pdf This unit covers identifying, accessing, interpreting and analyzing technical information in an enterprise, including quality documentation, equipment manufacturer specifications, engineering data sheets and national standards. It also covers explaining and using the information, and identifying implications of changes to technical information.

[Retrieved 10 September 2018]

❖ Diesel Engine Overhauling

http://www.rapowersolutions.com/DieselEngineOverhauling.aspx
This webpage provides information in overhauling diesel engines including rebuild of marine diesel engine and generators.

[Retrieved 10 September 2018]

❖ Alternator and Generator Repairs and Diagnosing

http://www.rapowersolutions.com/DieselEngineOverhauling.aspx
This webpage provides information about the alternator and its operation, problems, diagnosis and repair.

[Retrieved 10 September 2018]

❖ Electrical System Diagnosis and Repair

http://www.completeautoslo.com/electrical-system-diagnosis-and-repair
This webpage provides information about the diagnosis and repair of automobile electrical system

[Retrieved 10 September 2018]

Diesel Power Plant Operation and Maintenance NC II & NC III

Core Competencies

- Tend diesel engine
- Maintain and repair diesel engine systems and alternator
- Overhaul diesel engine
- Diagnose and repair diesel engine
- Service alternator/generator
- Diagnose and repair electrical system

INTERNET RESOURCES

❖ About Clean Diesel Power Generation

https://www.dieselforum.org/about-clean-diesel/power-generation

This webpage provides information about the role of diesel power plant or standby power station and generators and its effect to the environment and society.

[Retrieved 10 September 2018]

❖ Diesel Power Plant (Principle, Component, Layout, Applications) https://www.top-ee.com/diesel-power-plant/

This webpage provides information about the diesel power plant or standby power station that produces power in the range of 2 to 50 MW. [Retrieved 10 September 2018]

Diesel Power Plant Working and Applications, Advantages, Disadvantages

https://www.top-ee.com/diesel-power-plant/

This webpage provides information about the diesel power plant, its operation, advantages and disadvantages.

[Retrieved 10 September 2018]

❖ Diesel Power Plant Report

https://www.slideshare.net/EnamulKhan/diesel-power-plant-report
This webpage shows an online slide presentation focusing on the
study conducted for diesel power plant with illustrations and diagrams.

❖ Maintenance Service for Power Generation Facility

http://www.meidensha.com/products/maintenance/prod_01/prod_01_02/index .html

This webpage provides information on how to maintain a power generation facility by performing periodical inspection, parts replacement, diagnoses and renovations.

[Retrieved 10 September 2018]

Highspeed diesel overhaul service

http://www.goltens.com/diesel-engines/highspeed-diesel-overhaul-service
This webpage provides information the general overhaul of a diesel power plant including the planning and execution of this complex job.
[Retrieved 10 September 2018]

❖ Overhaul Technical Support

http://dieselexpert.com/en/our-services/workshop-maintenance/overhaultechnical-support/

This webpage provides guides and tips in overhauling diesel engine of a power generating units with links to related topics.

[Retrieved 10 September 2018]

❖ Diesel Power Plant & Gas Engine Plant

https://www.mhi.com/products/energy/diesel_power_plant_and_gas_engine_plant.html

This webpage provides information about diesel power plant and gas engine plant with links to related topics and images of power plants.

[Retrieved 10 September 2018]

❖ Wartsila 32

https://www.wartsila.com/products/marine-oil-gas/engines-generating-sets/diesel-engines/wartsila-32

This webpage provides information about the Wartzila 32 diesel engine designed to power large boats and ships as its main engine. This engine is mainly used for propulsion of large vessels and at the same time generates its electrical power requirements.

[Retrieved 10 September 2018]

Transmission Line Installation and Maintenance NC II & NC III

Core Competencies

- Perform transmission line erection
- Perform construction of overhead transmission line
- Perform cold line maintenance work
- Perform live-line maintenance work
- Perform ground and maintenance work
- Install emergency restoration structure (ERS)
- Plan T/L maintenance
- Implement T/L maintenance work
- Inspect/assess T/L component's condition

INTERNET RESOURCES

How Electricity Is Delivered to Consumers

https://www.eia.gov/energyexplained/index.php?page=electricity_delivery

Electricity is generated at power plants and moves through a complex system, sometimes called the *grid*, of electricity substations, Diesel Power transformers, and power lines that connect electricity producers and consumers.

[Retrieved 17 September 2018]

❖ Electric power transmission - Wikipedia

https://en.wikipedia.org/wiki/Electric_power_transmission

Electric power transmission is the bulk movement of electrical energy from a generating site, such as a power plant, to an electrical substation. ... This is distinct from the local wiring between high-voltage substations and customers, which is typically referred to as electric power distribution.

[Retrieved 17 September 2018]

❖ Energy Generation, Transmission and Distribution Competency Model

https://www.careeronestop.org/CompetencyModel/competencymodels/energy.aspx

The competency model framework for energy generation, transmission, and distribution was developed through a collaborative effort involving the Employment and Training Administration (ETA) and the Center for Energy Workforce Development (CEWD).

[Retrieved 11 September 2018]

❖ Electric Power Distribution Line Construction NC II

http://www.courses.com.ph/electric-power-distribution-line-construction-nc-iitesda-course-philippines/

Electric Power Distribution Line Construction NC II is a short TESDA course in the Philippines that will train you in erecting distribution line poles, climbing poles, and installing pole assembly, conductors, line equipment and devices as well as installing consumer service connection facility.

[Retrieved 10 September 2018]

❖ Energy: Renewable Energy Competency Model

https://www.careeronestop.org/CompetencyModel/competencymodels/renewable-energy.aspx

The Employment and Training Administration (ETA) worked with technical and subject matter experts from the Department of Energy, Office of Energy Efficiency and Renewable Energy (EERE), the National Renewable Energy Laboratories (NREL), and several industry associations to develop a competency model for renewable energy. [Retrieved 11 September 2018]

❖ Water and Wastewater Competency Model

 $\underline{\text{https://www.careeronestop.org/CompetencyModel/competency-models/water-sector.aspx}}$

In 2009, the American Water Works Association (AWWA) worked with its membership to identify the specific competencies required for workers in the water and wastewater industry.

[Retrieved 11 September 2018]

Applying Quality Standards | Occupational Safety And Health - Scribd

https://www.scribd.com/doc/93719231/Applying-Quality-Standards

Unit of Competency Apply quality standards Perform computer

INTERNET RESOURCES

operations Perform mensuration and calculation Prepare and interpret technical drawing Use ...

[Retrieved 11 September 2018]

❖ Guide to Distribution Power Line Characteristics

www.electricalpowerenergy.com/2017/02/08/distribution-power-line/

Conductors of overhead transmission and Distribution Power Line typically consist of aluminum, which is lightweight and relatively inexpensive, and are often reinforced with steel for strength.

[Retrieved 11 September 2018]

❖ Philippine Distribution Code

https://www.doe.gov.ph/sites/default/files/pdf/downloads/final_distribution_cod_e.pdf

The Philippine Distribution Code establishes the basic rules, procedures, requirements, and standards that govern the operation, maintenance, and development of the electric Distribution Systems in the Philippines.

[Retrieved 10 September 2018]

❖ How to Climb A Pole

https://www.youtube.com/watch?v=uubRVFStIFo

Even those in pole climbing competition had to start somewhere. Maybe this video is where you start. Maybe you are already there and just want to reminisce.

[Retrieved 17 September 2018]

❖ Transmission Line Installation and Maintenance NC II in the ... www.courses.com.ph → Engineering

Transmission Line Installation and Maintenance NC II is a short TESDA course in the Philippines that will train you in erecting transmission line poles....

[Retrieved 17 September 2018]

Competency Model Framework

http://college.lattc.edu/green/files/2010/08/Utility-Industry-Competency-Model-Framework.pdf

The Regional Economic Development Institute, within the Division of Economic and Workforce Development at Los Angeles Trade-Technical College, utilizes the competency model framework when conducting industry and occupation profiling activities.

[Retrieved 4 September 2018]

❖ Maintain Hand Tools, Equipment and Paraphernalia ... https://www.mustangbols.com/animation-2d/maintain

Maintain Hand Tools, Equipment and Paraphernalia. Although the operational reliability of each individual [Retrieved 17 September 2018]

❖ Materials Handling and Storage | Occupational Safety and Health ...

https://www.osha.gov/Publications/OSHA2236/osha2236.html
John L. Henshaw, Assistant Secretary ... Handling and
storing materials involve diverse operations such as hoisting tons of
steel with a crane; When operating or maintaining powered
industrial trucks, you and your employees must OSHA has a variety
of materials and tools available on its website -- www.osha.gov
[Retrieved 18 September 2018]

INTERNET RESOURCES

❖ Performing mensuration and calculation

https://www.slideshare.net/NormanPolilin/performing-mensuration-and-calculation

Using a pull-push rule measure the length, width, and thickness/height. [Retrieved 10 September 2018]

❖ Module Title: Performing Mensuration and Calculation http://draftingtechnologyguide.blogspot.com/2015/04/perform-mensurationand-calculation.html

Activities are properly arranged in this module to help you work at your own pace, this module also covers the knowledge, skills, and proper attitudes you need in Drafting Technology.

[Retrieved 10 September 2018]