

## DESIGN TECHNICIAN

### Position Summary

Outlined in this document is the position description for the Design Technician series and the various responsibilities performed in a Operating center. Requirements for each job include structured training and skill verification. Job attributes and performance expectations are also defined.

As employees complete the structured training necessary, meet the requirements of the skill verification, they will be able to progress through their career field. The levels through which progress may be expected are as follows:

	Level
Design Technician	I
Design Technician	II
Design Technician	Senior

Advancement beyond the Design Technician II will involve the Posting & Bidding Procedure.

As employees gain skills in the levels, progressive skill verification will be required to advance to the next level. The progressive skill verification will be based on expectations outlined in the employees' current job level. (Example – to move from Level I to Level II, the employees' skill verification would be based on their knowledge of expectations in Level I).

## **DESIGN TECHNICIAN LEVEL I, II**

Performs the technical design work of a less complex nature required for the construction, maintenance, rebuilding or operation of gas distribution facilities. Responsible for estimating the total project cost associated with work assignments.

### Level I

Performs primarily those tasks and duties which has been assigned and carries out such work under observation or checking by other Design Tech's and/or Engineers and/or Supervisor. Understands and redlines GIS gas maps, maintains records of gas property, designs projects to install, replace or remove gas distribution facilities.

Projects would include work similar to the following:

New Business projects involving plastic distribution gas main extensions (which include plats) including services to single residential customers which do not involve easement research and/or crossing known sensitive underground utilities (such as fiber optic cable, transmission pipelines, etc.).

Assist Design Tech II or Senior Design Tech on steel distribution gas main replacement projects (which are listed in the Design Tech II Performance Expectation section) for training purposes.

### Level II

Performs primarily those tasks and duties which has been assigned and carries out such work under observation or checking from time to time by other Design Tech's and/or Engineers and/or Supervisor. Facilitates design of gas replacements or relocations projects.

Projects would include work similar to the following:

Public Improvement and System Improvement Projects.

High pressure gas main extensions and replacements which do not involve grade changes in excess of 18" and/or pipe size greater than 8".

Assist Senior Design Tech on high pressure gas main extensions and replacements (which are listed in the Senior Design Tech Performance Expectation section) for training purposes.

## **General Comments**

Must meet the Company's general qualifications.

Job knowledge and competence will be demonstrated on a periodic basis by successful completion of job related skills verification.

Will participate in training as required. Work assignments will be based on training that has been received.

Will adhere to company and departmental policies, standards and established procedures.

This job description attempts to give examples of the tasks associated with the job; however, the listings are not all inclusive.

Safety is the responsibility of every employee at Vectren. All safety procedures or policies outlined in job procedures, safety reference guide, training classes and agency requirements (OSHA, etc.) are expected to be followed.

## **DESIGN TECHNICIAN LEVEL I**

### **Qualifications**

#### **Entry Level**

Two years of technical education in the area of mechanical, or has completed additional education such as the courses provided below or the equivalent courses from accredited institutions. Possess a valid driver's license.

1. Technical Mathematics I \*
2. Introduction to CAD concepts \*
3. PC Applications in Eng. Technology
4. Technical Mathematics II
5. Architectural Blueprint Reading
6. Basic Construction Surveying
7. Architectural Drafting

\*Note: Courses #'s 1 and 2 are a prerequisite to being considered for a Design Technician job vacancy. The remaining courses or the equivalent courses, such as listed above must be completed during the first two years as a Design Technician I.

#### **Job Attributes**

Minimal manual or physical skill required. Work involving light physical exertion while working on job site.

The numerous tasks in gas distribution design require a medium degree of independent judgment within established standards and procedures.

Technical work requires close mental and visual concentration to achieve high levels of accuracy.

Responsible for the design and work order preparation as well as onsite technical direction to ensure safety to self and others. Work on job site involves risk of injury. Work will occasionally require activities when the conditions are less than ideal.

Routine work involving use of company vehicles and small equipment. Responsible for planning and designing gas distribution facilities.

Many tasks involve the preparation and/or use of confidential plans and other documents.

Work involves frequent public contacts with customers, developers and other utilities pertaining to company policy and procedures.

Work includes maintaining and updating property accounting records.

Work involves regular contact with other departments.

Tasks require responsibility for completion of non-routine assignments while receiving occasional supervision.

Has responsibility for the technical advice to company crews, other utility crews and construction personnel.

## **DESIGN TECHNICIAN LEVEL I,**

### **Performance Expectations Upon Completion of Training and On the Job Experience**

#### **Level I**

Complete paperwork necessary for work orders.

Utilize applicable codes and standards: Vectren O&M Standards, Vectren Safety Guidelines, Pipeline Safety Regulations (Part 192) and other pertinent regulatory requirements.

Prepare background drawings and design simple work orders under direct supervision such as:

Projects would include work similar to the following:

- New Business projects involving plastic distribution gas main extensions (which include plats) including services to single residential customers which do not involve easement research and/or crossing known sensitive underground utilities (such as fiber optic cable, transmission pipelines, etc.).
- Assist Design Tech II or Senior Design Tech on steel distribution gas main replacement projects (which are listed in the Design Tech II Performance Expectation section) for training purposes.
- Permits which do not involve profiles and easements.

Become proficient in the use of the following software/programs: (with assistance as needed)

Customer Information System – CIS (Banner)

Enterprise Asset Management - EAM (Maximo)

Fixed Asset System for Plant Accounting (PowerPlant)

Enterprise Resource Planning – ERP (Oracle)

Geographic Information System – GIS (ESRI ArcGIS)

Graphical Design Tool (Designer)

Enterprise Content Management for Document and Image management (InfoPort / OnBase / Sharepoint)

Microsoft Office Applications

Web Based County Property Record Search

Web Based Maps (Google / Bing)

Understand basic surveying techniques, stake proposed projects and gather post-construction field notes.

Perform site visits.

Interact with residential customers and contractors in a professional manner.

Corrosion Department review of project prior to final design.

Utilize personal computer and customer account information.

Analyze gas outages.

Initiate and process Joint Trench Agreements.

Close out and record completed work orders.

Design gas regulator / meter settings for loads up to and including 250 meter.

Assist other company personnel.

Perform other similar or less skilled work.

### **Fully Qualified**

A minimum of two years' experience as a Design Technician or the equivalent and demonstrate the ability to perform the tasks of the job by successfully completing the skill verifications. Employees entering the job series after 7/1/13 must have completed all the courses in the development plan for Design Technician I or have two years of technical education in the area of mechanical.

## DESIGN TECHNICIAN LEVEL II

### Entry Level

Two years' experience as a Design Technician I or equivalent and demonstrate the ability to perform all tasks of the Design Technician I. Must have completed all of the courses in the development plan for Design Technician I or have two years of technical education in the area of mechanical.

### Performance Expectations Upon Completion of Training and On the Job Experience

#### Level II

All performance expectations of Design Technician I.

Design projects of increasing difficulty under some supervision such as:

Projects would include work similar to the following:

- Public Improvement and System Improvement Projects.
- High pressure gas main extensions and replacements which do not involve grade changes in excess of 18" and/or pipe size greater than 8".
- Permits which involve profiles and easements but do not require the location of all other (non-Vectren) underground utilities.
- As assigned, design gas regulator/meter settings commercial and residential for loads up to and including 1000 meter. Note: This work can be performed by either Engineers or Design Technicians.
- Assist Senior Design Tech on high pressure gas main extensions and replacements (which are listed in the Senior Design Tech Performance Expectation section) for training purposes.
- Perform assigned design work on bare steel cast iron project of less than 500 feet.

Proficient in the use of the following software/programs:

Customer Information System – CIS (Banner)  
Enterprise Asset Management - EAM (Maximo)  
Fixed Asset System for Plant Accounting (PowerPlant)  
Enterprise Resource Planning – ERP (Oracle)  
Geographic Information System – GIS (ESRI ArcGIS)  
Graphical Design Tool (Designer)

Enterprise Content Management for Document and Image management (InfoPort / OnBase/Sharepoint)

Microsoft Office Applications

Web Based County Property Record Search

Web Based Maps (Google/Bing)

Microsoft Office Applications

Understand basic marketing policies.

Interact with commercial, industrial and governmental customers, developers, architects and engineers from outside firms and other Vectren personnel.

Assist and instruct other company personnel in matters relating to gas distribution design.

Identify and analyze abnormal conditions on gas distribution systems.

Perform other similar or less skilled work.

### **Fully Qualified**

A minimum of two years' experience as a Design Technician II or the equivalent and demonstrate the ability to perform the tasks of the job by successfully completing all the skill verifications.

Employees entering job series after 7/1/13 must have completed all the courses in the development plan for Design Technician I or have two years of technical education in the area of mechanical.

## **SENIOR DESIGN TECHNICIAN**

Performs technical design work required for the operation, construction, maintenance or rebuilding of gas distribution facilities. Responsible for estimating the total project cost associated with work assignments. Assists engineer by performing gas system calculations, identifying and implementing system improvements, analyzes alterations and makes recommendations for projects. Assists and instructs other company personnel in matters related to Senior Design Technician responsibilities.

### **General Comments**

Must meet the company's general qualifications.

Job knowledge and competence will be demonstrated on a periodic basis by successful completion of job related skills verification.

Will participate in training as required. Work assignments will be based on training that has been received.

Will adhere to company and departmental policies, standards and established procedures.

This job description attempts to give examples of the tasks associated with the job; however, the listings are not all inclusive.

Safety is the responsibility of every employee at Vectren. All safety procedures or policies outlined in job procedures, safety reference guide, training classes and agency requirements (OSHA, etc.) are expected to be followed.

### **Qualifications**

#### **Entry Level**

A minimum of 4 years as a Design Technician and meet the requirements of a fully qualified Design Technician II.

## **SENIOR DESIGN TECHNICIAN**

### **Job Attributes**

Work requires minimal manual or physical skills. Work involving light physical exertion while working on job sites.

The numerous complex tasks require the exercise of considerable degree of independent judgment within established limits.

Technical work requires close mental and visual concentration to achieve high levels of accuracy.

Responsible for the design and work order preparation as well as on technical direction to ensure safety of self and others.

Work on job sites involves occasional risk of injury. Work will occasionally require activities when the conditions are less than ideal.

Work involves use of company vehicles and small equipment. Responsible for planning and designing gas distribution facilities.

Many tasks involve the preparation and/or use of confidential plans and other documents.

Work involves frequent public contacts with customers, developers and other utilities pertaining to company policy and procedures.

Contacts involve making regular work arrangements and following of non-routine assignments.

Individual employee has responsibility for completion of non-routine assignments while receiving limited supervision.

Will direct the activities of other employees in the Design Technician series. Has responsibility for technical advice to company crews, other utility crews and construction personnel.

## SENIOR DESIGN TECHNICIAN

### Performance Expectations Upon Completion of Training and On the Job Experience

All performance expectations of Design Technician II.

Projects would include work similar to the following:

- High pressure gas main extensions and replacements which involve grade changes in excess of 18" and/or pipe size greater than 8".
- Permits which require the location of all other (non Vectren) underground utilities.
- Perform field work associated with Uprate procedure.
- As assigned, designing gas regulator/meter settings for commercial and residential for loads up to and including 3M rotary meter. Note: This work can be performed by either Engineers or Design Technicians.
- Perform assigned work on Operational Plan utilizing Form 3185 v. 12.02

Assist engineer in identifying and implementing gas distribution system improvements.

Assist and instruct other company personnel in matters related to Senior Design Technician responsibilities. Will direct the activities of other employees in the Design Technician job.

Propose and analyze project alternatives and make recommendation.

Has a working knowledge of national, local and company standards and codes and other pertinent regulatory requirements as they relate to Senior Design Technician responsibilities.

Perform other similar or less skilled work.

Perform assigned design work on bare steel cast iron projects of greater than 500 feet.

#### **Fully Qualified**

A minimum of one year experience as a Senior Design Technician and demonstrate the ability to perform tasks of the job by successfully completing the skill verification.