

# POWER CONTRACT

THIS CONTRACT, made this \_\_\_\_day of \_\_\_\_, 20\_\_\_\_, by and between \_\_\_\_\_, hereinafter called the "**Customer**," located at \_\_\_\_\_ and the City of Gallatin, Department of Electricity, with office at Gallatin, Tennessee, hereinafter called the "**Distributor**."

## **WITNESSETH:**

WHEREAS, the Customer has applied to the Distributor for electricity for the operation of a \_\_\_\_\_ business in Gallatin, Tennessee.

NOW, THEREFORE, in consideration of the premises and the mutual agreements hereinafter set forth, the parties hereto agree as follows:

1. The Distributor will supply, and the Customer will take and pay for all the electricity required for the operation of the \_\_\_\_\_ business at Gallatin, Tennessee, in accordance with the terms hereof and the Rules and Regulations of the Distributor, a copy of which is attached hereto and hereby made a part hereof. This contract allows a maximum demand not exceeding \_\_\_\_\_ KW. The Customer shall not take electricity in excess of such maximum demand except by agreement of the Distributor and revision of contract, but nothing herein contained shall be construed to relieve the Customer of the obligations to pay for such amounts of electricity as may actually be taken.

2. Except as otherwise expressly provided in this agreement, the electric power and energy sold hereunder shall be purchased and paid for by the Customer according to the provisions of the Distributor's standard schedule of rates and charges applicable to power customers, as modified from time to time. Attached hereto is the currently effective Power Rate Schedule Summary.

3. The electricity furnished hereunder shall be in the form of three phase, alternating current, at approximately 60 cycles and \_\_\_\_\_volts.

4. The Point of Delivery for the electricity supplied hereunder shall be at the Customer's secondary buss. Maintenance of approximately the above stated voltage and frequency by the Distributor shall constitute delivery of electricity for the purpose of this contract. The electricity to be supplied the Customer hereunder shall be metered at the building which houses the business. The Customer shall furnish the Distributor gratis with a right-of-way over and across the Customer's property upon which to construct, maintain and operate distribution facilities and related equipment leading to the transformers serving the Customer for the period hereof. The distribution facilities and related equipment including the meter installed on said right-of-way are to be the personal property of the Distributor. The Distributor's agents and employees have free right of ingress and egress on and to said right-of-way.

5. The term of this contract shall be three (3) years. This contract shall begin on the date actual delivery of electricity is begun, which is estimated to be approximately \_\_\_\_\_, 20\_\_\_\_ and shall be considered renewed for a year from the expiration of said term, and from year to year thereafter, unless a written notice to the contrary is given by either party to the other at least three (3) months prior to the expiration of the term of the contract or any then existing renewal thereof.

6. The Customer shall pay as a minimum the amounts determined under the provisions of the minimum bill section in the appropriate rate schedule.

7. The Distributor will use reasonable diligence to provide a regular and uninterrupted supply of current, but in case the supply of current should be interrupted or interfered with for any cause, the Distributor shall not be liable for damage resulting there from. The Customer agrees to operate his equipment in such a manner that he will not cause unusual voltage fluctuation, voltage distortion or disturbances on the Distributor's system.

8. The Customer agrees to operate his equipment within the recommended practices of Standard 519, "Recommended Practices and Requirements for Harmonic Control in Electric Power Systems", published by the Institute of Electrical and Electronics Engineers (IEEE), with respect to Total Demand Distortion limits and power system transients at the point of common coupling (PCC). The PCC shall be the high voltage terminals of the power transformer when the Customer is served from a dedicated service transformer. When multiple Customers are served from a single service transformer, the PCC shall be the low voltage transformer terminals. TDD limits are based on a ratio of the available power system short circuit current to the Customer load current. Customer agrees to the limits listed in the following table (reproduced from IEEE Standard 519):

<b>MAXIMUM HARMONIC CURRENT DISTORTION</b>						
<b>IN % OF I<sub>L</sub></b>						
<b>INDIVIDUAL HARMONIC ORDER (ODD HARMONICS)</b>						
<b>I<sub>sc</sub>/I<sub>L</sub></b>	<b>&lt;11</b>	<b>11# h &lt;17</b>	<b>17# h &lt; 23</b>	<b>23# h &lt; 35</b>	<b>35#h</b>	<b>TDD</b>
<b>&lt;20*</b>	4.0	2.0	1.5	0.6	0.3	5.0
<b>20&lt;50</b>	7.0	3.5	2.5	1.0	0.5	8.0
<b>50&lt;100</b>	10.0	4.5	4.0	1.5	0.7	12.0
<b>100&lt;1000</b>	12.0	5.5	5.0	2.0	1.0	15.0
<b>&gt;1000</b>	15.0	7.0	6.0	2.5	1.4	20.0
Even harmonics are limited to 25% of the odd harmonic limits above.						
Current distortions that result in a direct current offset, e.g. half wave converters are not allowed.						
* All power generation equipment is limited to these values of current distortion, regardless of actual I <sub>sc</sub> / I <sub>L</sub> .						
Where h = harmonic order (60Hz = 1) I <sub>sc</sub> = Maximum short circuit current at PCC. I <sub>L</sub> = Maximum demand load current (fundamental frequency component) at PCC under normal load operating conditions.						

Multiple service transformers serving a single Customer shall be considered individually with respect to the TDD limits regardless of the Customer metering arrangement.

9. The Customer acknowledges:

- A. Operation of Customer equipment exceeding the TDD limits listed may have a detrimental impact on the Distributor's power system and service to other Distributor customers.

- B.** Continued operation of Customer equipment exceeding the established TDD limits may lead to disconnection of electrical service by the Distributor until Customer takes corrective action to mitigate the impact on the Distributor’s system. Customer agrees to reimburse Distributor for any and all costs the Distributor accrues to mitigate power system problems caused by Customer inaction to control TDD.
- C.** Meeting TDD limits at the PCC does not prevent possible problems internal to Customer premises due to harmonics generated by Customer equipment.
- D.** Customer harmonic load currents may lead to excessive heating and insulation damage of the service transformer.

Upon request, Customer shall provide total calculated TDD data and other appropriate data for each Customer PCC to allow determination of service transformer size and other service requirements.

Distributor’s service transformer shall be sized to meet the demand requirements of the Customer’s non-harmonic load characteristics. The Customer shall be responsible for all costs associated with the installation of excess transformer capacity required due to the Customer’s harmonic load characteristics.

Service transformer capacity will be assessed using the industry standard methods presented in IEEE Standard C57.110, “Recommended Practice for Establishing Transformer Capability When Supplying Nonsinusoidal Load Currents”. Customer provided load characteristics shall be used for initial capacity calculations, however, measured harmonic content of the load current and operational temperatures will be Distributor’s decision factors related to the long-term operation of the transformer.

The Customer is responsible for all costs, including engineering, installation, and equipment cost, of any and all equipment required for the Customer to meet the appropriate TDD limits for the specific installation PCC. TDD limits shall be measured and determined by standard industry methods as presented in IEEE Standard 519.

**10.** This contract shall inure to the benefit of and be binding upon the respective heirs, legal representatives, successors, and assigns of the parties hereto, but is not assignable by the Customer without written consent of the Distributor.

IN WITNESS WHEREOF, the parties hereto have caused this contract to be duly executed in Gallatin, Tennessee, the day and year first above written.

**CITY OF GALLATIN, TENNESSEE  
DEPARTMENT OF ELECTRICITY**

\_\_\_\_\_  
**CUSTOMER**

**BY:** \_\_\_\_\_

\_\_\_\_\_  
**BY:**

\_\_\_\_\_  
**TITLE**

\_\_\_\_\_  
**PRINT OR TYPE NAME**

\_\_\_\_\_  
**DATE**

\_\_\_\_\_  
**TITLE**

\_\_\_\_\_  
**DATE**