

## Application and Problem Description

This form is intended to collect as much information about the application and the problem. Complete disclosure facilitates understanding the problem as soon as possible, and therefore a solution to the problem at the least cost of troubleshooting. A schematic diagram and other supporting documentation will most likely be requested for more detailed evaluation.

Please give your contact information here:

Name: \_\_\_\_\_ Title: \_\_\_\_\_ Company: \_\_\_\_\_

Address: \_\_\_\_\_

Phone / Fax / email: \_\_\_\_\_

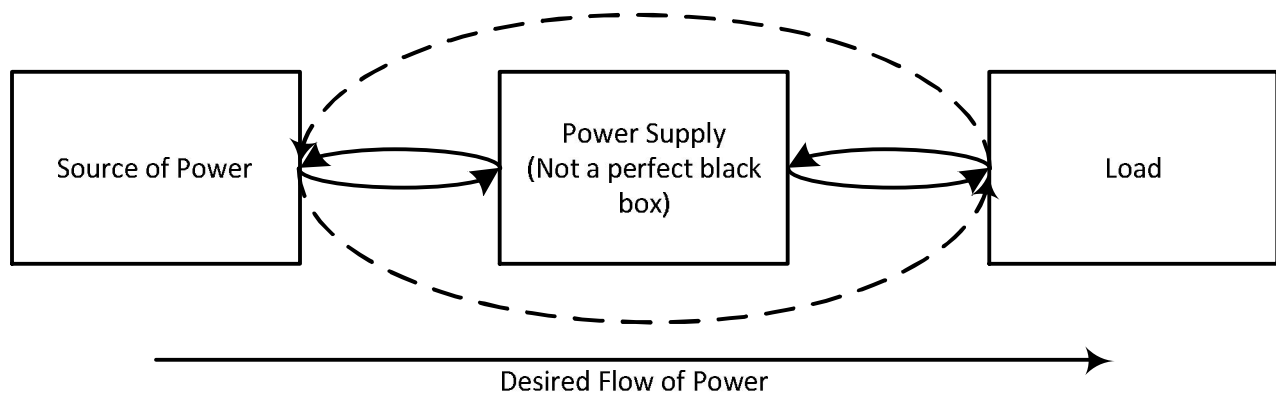
Project Name: \_\_\_\_\_

### The Power Supply is Part of a Larger System.

A power supply should be viewed as the intermediary component in a system of three parts. The input part to the power supply is the source and the output part is the load. Since the power supply is not a perfect black box element, the characteristics of all three parts must be viewed together as each part directly or indirectly interacts with and affects the performance of the other parts.

Solid lines represent a direct influence.

Dashed lines represent indirect influence through the power supply.



**In the following pages, please answer questions as completely as possible.**

- 1) In this section, please indicate the application class: residential, commercial, industrial, military, aerospace, medical, other. (Circle one) Please give additional description of the product.
  
- 2) In this section, please describe the load characteristics, (if the power supply has multiple outputs please attach information for each additional output at the end of this form):
  - a) Does the load require the power supply to output constant voltage, constant current, or constant power? (Circle one.)
  - b) What is the allowable operational range of the output that the load will reliably tolerate?
  - c) Is the output desired to be user adjustable? If so, is there a setpoint accuracy requirement?
  - d) What is the maximum/minimum power that the load will draw?
  - e) What is the maximum ripple voltage that can be tolerated?
  - f) What is the maximum load regulation that can be tolerated?
  - g) What is the maximum line regulation that can be tolerated?
  - h) If the power supply must provide multiple outputs, what is the maximum cross regulation that can be tolerated?
  - i) What is the capacitance that the load presents to the power supply?
  - j) Is there a holdup time requirement?
  - k) Please describe the what the load is:
  
- 3) In this section, please describe the source characteristics:
  - a) Is the source AC or DC? If AC what are the maximum/minimum source frequencies?
  - b) What are the maximum/minimum source voltage levels that the power supply must accommodate?
  - c) What are the source impedance characteristics, if known?
  - d) Is there a requirement for attenuating conducted or radiated emissions? If so, what is the applicable standard or desired specification?
  
- 4) In this section, please describe the operating and storage environment:
  - a) What is the maximum/minimum operating temperature?
  - b) What is the maximum/minimum storage temperature?
  - c) Are there any shock and vibration requirements?
  - d) Please add any other environmental requirements here:
  
- 5) In this section, please give all other important requirements:
  
  
- 6) In this section, please describe the existing topology:

7) In this section, please describe the symptoms or misbehavior: Give as much detail as possible.

In this section, please give any additional notes and overflow from previous sections. Please reference the appropriate section by outline number.