To: Dave Cosby  
From: Rhonda Tramble  
Re: Emergency and Standby Power Systems and Transfer Equipment  

SUMMARY  
Per your request, the following are the code references and brief explanations regarding building emergency and standby power supplies and their transfer equipment.  

The currently adopted 2004 California Electrical Code based on the 2002 National Electrical Code addresses emergency and standby power systems in Article 700, 701, 702 and 705.  

The specific question regarding connection of "emergency and legally required standby" loads and "optional standby" loads to the same generator are addressed below.  

For Emergency Systems:  
"Transfer equipment, including automatic transfer switches, shall be automatic, identified for emergency use, and approved by the authority having jurisdiction."  
"Transfer equipment shall supply only emergency loads."  

For Legally Required Standby Systems:  
"Transfer equipment, including automatic transfer switches, shall be automatic and identified for standby use, and approved by the authority having jurisdiction."  

For Optional Standby Systems:  
Transfer equipment shall …"supply power to selected loads either automatically or manually."  

We design systems to meet these code requirements by using one generator with two separate transfer switches and distribution panels, one for emergency and one for standby.  

DEFINITIONS:  
Emergency systems are…."intended to supply, distribute and control power and illumination essential for safety to human life."  

Legally required standby systems are…"classed as legally required standby by municipal, state, federal or other codes or by any governmental agency having jurisdiction….and are intended to automatically supply power to selected loads other than those classed as emergency….that, when stopped during any interruption of normal electrical supply, could create hazards or hamper rescue or fire-fighting operations."  

Optional standby systems are …"intended to protect public or private facilities or property where life safety does not depend on the performance of the system….and serve loads that when stopped during any power outage, could cause discomfort, serious interruption of the process, damage to the product or process or the like."