# Considerations Regarding Infrared Thermal Stresses Monitoring of Electrical Equipment

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***Abstract* — The paper aim is to analyze the way in which the electrical load influences the infrared thermal images of the thermal stresses of electrical equipment determined by using infrared thermography devices. In order to obtain a reliable result of the infrared investigations several conditions must be accomplished, such as good definition of the correction parameters and choosing the optimal environmental conditions to perform the investigation. The paper presents the way in which it is corrected the electrical load of the collector busbar system after the thermal image was captured in order to determine its thermal stresses. On an experimental setup there were performed several attempts to determine the thermal stress of a portion from a HV (high voltage) collector busbar system which has two ramifications with the same electrical loads.**

***Keywords*— infrared thermography, thermal stresses, HV busbar systems**

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