The aim of the thesis ‘Security of electricity supplies in the EU’ is to verify validity of the argument that three objective of EU energy policy which the European Council officially agreed upon in 2007 might be conflicting in their practical implementation. Those objectives involve: increasing the competitiveness of European economies and the availability of affordable energy, combating climate change and increasing security of supply. In order to verify relevance of this hypothesis, security of supply is narrowed down to the case of electricity as a specific commodity. With regard to the other two goals, the paper identifies main challenges to security of electricity supplies. Subsequently, the analysis of policy and legislative measures adopted at the EU level which should tackle these challenges is performed and their adequacy evaluated. Inadequate network infrastructure investment and absence of coordinated grid development as well as coordinated system operation are perceived as main concerns. Last but not least, the thesis analyzes interpretations of identified deficiencies provided by four theoretical approaches to European integration – neofunctionalism, liberal intergovernmentalism, new institutionalism and multi-level governance.