بخشی از ترجمه مقاله

عنوان فارسی مقاله:
شناسایی علت اصلی اختلالات سیستم قدرت براساس الگوهای شکل موج

عنوان انگلیسی مقاله:
Identifying the root cause of power system disturbances
based on waveform templates

توجه!
این فایل تنها قسمتی از ترجمه میباشد. برای تهیه مقاله ترجمه شده کامل با فرمت ورد (قابل ویرایش) همراه با نسخه انگلیسی مقاله، اینجا کلیک نمایید.
7. Conclusions

In this paper, a novel method to identify the root cause of three power disturbances, i.e. capacitor energization, no-load transformer energization, and motor starting, is proposed. The proposed method first develops the template for each disturbance based on their characteristics. Then, the developed templates are used to fit the disturbances recorded at the substation. The root cause of the disturbance is identified once the fitness is successful.

The proposed method has been verified by simulation studies and lab experiments. The impact of practical issues, such as switching locations, energization capacities, switching instants and the measurement noise has been studied. Finally, the performance of the proposed method is evaluated using the field data. The results indicate that the proposed method is robust and effective in practice.

The main contribution of this paper is to introduce a waveform-template based method for the root cause identification of power disturbances. The templates developed is not limited to three common energizing events. The future research will develop templates for other power quality disturbances.