

## عنوان مقاله:

Incorporating Risk Assessment in Maintenance scheduling Regarding Reward Penalty Scheme

## محل انتشار:

سومین کنفرانس منطقه ای سیرد (سال: 1393)

تعداد صفحات اصل مقاله: 6

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## خلاصه مقاله:

In the recent years, the regulators employ various forms of reward/penalty schemes (RPS) in electric distribution networks to ensure the reliability of services. In the presence of RPS, distribution system operators (DSOs) would be exposed to financial penalty if they cannot provide reliable service to the customers. This means that the uncertainty in the reliability of services shows itself in financial risk faced by DSO. In such circumstance, DSOs are induced to reinforce the reliability of service through reliability reinforcement projects such as preventive maintenance (PM) projects. The maintenance projects should be managed in a way that the maximum profit can be obtained in the minimum risk. This study introduces risk-based maintenance management in the presence of RPS. Modeling the dependency of component failure rate on the preventive maintenance (PM) expenditure is the core of risk-based maintenance management, and this paper introduces the generalized proportional failure rate model (GPFM) for this purpose. This model together with the outage time generation algorithm (OTGA) help us to determine the financial risk faced by DSO. To verify the proposed method, it was implemented in the overhead line (OHL) feeders of a real distribution network.

## کلمات کلیدی:

maintenance scheduling; risk based optimization; power distribution overhead line

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1479409>

