2018 Electrical Power Distribution Conference (EPDC 2018)

Tehran, Iran 9 – 10 May 2018



IEEE Catalog Number: CFP1831P-POD ISBN: 978-1-5386-6907-5

Copyright \odot 2018 by the Institute of Electrical and Electronics Engineers, Inc. All Rights Reserved

Copyright and Reprint Permissions: Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

For other copying, reprint or republication permission, write to IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. All rights reserved.

*** This is a print representation of what appears in the IEEE Digital Library. Some format issues inherent in the e-media version may also appear in this print version.

 IEEE Catalog Number:
 CFP1831P-POD

 ISBN (Print-On-Demand):
 978-1-5386-6907-5

 ISBN (Online):
 978-1-5386-6906-8

Additional Copies of This Publication Are Available From:

Curran Associates, Inc 57 Morehouse Lane Red Hook, NY 12571 USA Phone: (845) 758-0400

Fax: (845) 758-2633

E-mail: curran@proceedings.com Web: www.proceedings.com



TABLE OF CONTENTS

THE NEW METHOD FOR IDENTIFYING DEMAND CONSUMERS WITH A REACTIVE POWER CONSUMPTION OUTSIDE THE SCOPE SET BY THE MINISTRY OF ENERGY	1
Maryam Borzouei ; Mostafa Babaei	1
LINEAR VOLTAGE BASED STATE ESTIMATOR FOR ACTIVE DISTRIBUTION SYSTEM	
INCLUDING PHASOR MEASUREMENT UNIT (PMU)	5
Mohammad Gholami ; Ali Abbaspour Tehrani Fard ; Moein Moeini-Aghtaie	
HALF-BRIDGE POWER QUALITY CONDITIONER FOR RAILWAY TRACTION	
DISTRIBUTION SYSTEM BASED ON A NEW BALANCING TRANSFORMER	11
Hossein Mahdinia Roudsari ; Alireza Jalilian ; Sadegh Jamali	11
PROVIDING TECHNICAL AND ECONOMIC INDICATORS FOR ASSESSING THE	
PERFORMANCE OF ELECTRICITY MARKET OFFICES AT THE LEVEL OF DISTRIBUTION	
COMPANIES	18
Mohammad Mohammadinia ; Farhad Varposhti ; Hassan Shakeri	10
BUSINESS PRIORITIZATION IN ELECTRIC DISTRIBUTION NETWORK USING ANALYTIC	
HIERARCHY PROCESS: A CASE STUDY FOR IRAN	24
Sajjad Solar ; Mohammad Jafarian ; Heidar-Ali Shayanfar ; Niki Moslemi ; Akbar Yavartalab	
DEVELOPING A MILP METHOD FOR DISTRIBUTION SYSTEM RECONFIGURATION	
AFTER NATURAL DISASTERS	28
Ali Arjomandi-Nezhad ; Mahmud Fotuhi-Firuzabad ; Hesam Mazaheri ; Moein Moeini-Aghtaie	20
A NOVEL STRATEGY FOR PROVIDING VISIBILITY OF DISTRIBUTED GENERATORS	
(DGS) IN DISPATCHING CENTERS	34
Ashkan Tashk ; Hoshyar Omidi	
EFFECT OF SYNCHRONOUS GENERATOR-BASED DISTRIBUTED GENERATION	
RESOURCES ON POWER SYSTEM TRANSIENT STABILITY CONSIDERING CRITICAL	
CLEARING TIME INDEX	40
N. Ghasemkhani ; R. Khalili ; B. Zaker ; G. B. Gharehpetian	
A NEW HEURISTIC METHOD FOR DISTRIBUTION NETWORK RESTORATION AND LOAD	
ELIMINATION USING GENETIC ALGORITHM	46
Mohsen Molaali ; Mehrdad Abedi	
INCREASING REDUNDANCY AND COST REDUCTION TO IMPROVE POWER FACTOR AND	
REDUCE HARMONIC USING PARALLEL CONNECTION OF D-STATCOMS	52
Pourya Sarvghadi ; Ali Yazdian ; Reza Ghazi	
FEASIBILITY OF AMORPHOUS SYMMETRIC CORE TRANSFORMER UNDER	
DISTRIBUTION NETWORK PLANNING	57
Mehran Hajiaghapour-Moghimi ; Ahmad Moradnouri ; Mehdi Vakilian	
ONLINE OPERATIONAL BUDGETING OF ELECTRICITY DISTRIBUTION NETWORK	
BASED ON INTEGRATION STRATEGIC AND OPERATIONAL PLANNING BY SWOT & AHP	
METHODS	63
ValiAllah Naseri ; Babak Kashanizadeh ; Farhad Varposhti	
IMPACT OF DEMAND RESPONSE PROGRAM IN MASHHAD DISTRIBUTION COMPANY ON	
THE SYSTEM AVERAGE INTERRUPTION DURATION (SAIDI)	69
Payam Mohammadian Yazdi ; Seyed Amir Hossein Bahreyni	
PROVIDING A SUITABLE MODEL FOR IMPROVING MANPOWER PRODUCTIVITY IN	
MASHHAD ELECTRIC ENERGY DISTRIBUTION COMPANY USING THE QUALITY	
CONTROL CIRCLE APPROACH	73
Mostafa Hoorzad ; Leila Neshat ; Hamidreza Shariat Davoodi	
IDENTIFICATION OF THE BEST CHARGING TIME OF ELECTRIC VEHICLES IN FAST	
CHARGING STATIONS CONNECTED TO SMART GRID BASED ON Q-LEARNING	78
Morteza Rahimi Shaarbaf ; Mohsen Ghayeni	
Author Index	