2022 International Conference on **Protection and Automation of** Power Systems (IPAPS 2022)

Zahedan, Iran 19 – 20 January 2022



IEEE Catalog Number: CFP22AB3-POD ISBN:

978-1-6654-8438-1

Copyright © 2022 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:
 CFP22AB3-POD

 ISBN (Print-On-Demand):
 978-1-6654-8438-1

 ISBN (Online):
 978-1-6654-8437-4

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



The 16th International Conference on Protection and Automation of Power Systems (IPAPS2022)

Faculty of Electrical and Computer Engineering, University of Sistan and Baluchestan, Zahedan, Iran, January. 19-20, 2022

IPAPS2022 Papers

Seq.	Edas	Paper Title	Authors	Pages
1		Optimal Protection of Smart Grids Using Communication-based Dual-setting Directional Overcurrent Relays Consideration Different Grid Configurations	Mehdi Aghaei-Fatideh, Hamed Hashemi- Dezaki, Abolfazl Halvaei Niasar	10-15
2		Comparing the Superimposed Voltage-Current-Based and Superimposed Energy-Based Fault Detection Methods in Series-Compensated Lines: Exploring Challenges and Issues	Hossein Ebrahimi,Amin Yazdaninejadi	16-25
3		A new method to improve reliability of power grid by using plug in hybrid electric vehicles and distributed generation	Mohammad Hosein Fazaeli, Mohammad Mostafa Keramat, HashemAlipour	26-30
4	2022029486	Optimization of Recloser-fuse Coordination by considering distributed generation and FCL	Mojtaba Naseh	31-36
5	2022029488	Optimal Protective Coordination of Microgrids Considering N-1 Contingency Using Dual Characteristics Directional Overcurrent Relays	Amir Hossein Ataee-Kachoee,Hamed Hashemi-Dezaki,Abbas Ketabi	37-46
6	2022029490	Over view on Virtual Manufacturing Device in substation automation	Hashem Alipour ,Mohammad Hosein Fazaeli, Mohammad Mostafa Keramat	47-51
7		An Agile Black-Out Detection and Response Paradigm in Smart Grids Incorporating IoT-Oriented Initiatives and Fog-Computing Platform	Hossein Shahinzadeh, S.M. Muyeen, Arezou Mahmoudi, Mohamed Benbouzid	52-59
8	2022029492	Fast Prediction of Transient and Short-term Voltage Instability Employing System Integrity Protection Scheme	Mahmoud Lashgari, S. Mohammad Shahrtash	60-65
9	2022029493	A Hybrid Scheme for Fault Locating for Transmission Lines with TCSC	Morteza Azimi Nasab, Mohammad Zand, Ali Hatami, Fatemeh Nikoukar, Sanjeevikumar Padmanaban, Amir Hossein Kimiai	66-75

10	2022029494	Feature Construction to Detect and Locate FDIAs Using PNN and SVM models	Seyyed mohammad sadegh Seyyed hakim, Hossein Kazemi karegar	76-83
11	2022029495	Experimental Validation of Frequency Response of an CVT for EHV Harmonic Measurements	Saeed Moharrami, Hossein Mokhtari	84-89
12	2022029496	A novel approach for modeling and maintenance of power system substation automation	Mohammad Hosein Fazaeli, Mohammad Mostafa Keramat, HashemAlipour	90-93
13	2022029500	Using the smart tags technology in power system substation automation	HashemAlipour, Mohammad Hosein Fazaeli, Mohammad Mostafa Keramat	94-99
14	2022029502	Optimal Design of High Density HTS-SMES Step-Shaped Cross- Sectional Solenoid to mechanical stress reduction	Amir Hossein Kimiai Asadi, Alireza Jahangiri, Mohammad Zand, Mohsen Eskandari, Morteza Azimi Nasab, Hassan Meyar-Naimi	100-105
15	2022029503	The impact of a distributed generation and electric-vehicle parking on the coordination of the fuse-recloser	Mohammad Hosein Fazaeli, Mohammad Mostafa Keramat, HashemAlipour	106-115
16	2022033540	Side Effects of Air-Core Reactors in Bus Ties, Tackled by Pre-Saturated Core Fault Current Limiters	Teymoor Ghanbari, Abbas Mehraban	116-123
17	2022033544	Data Threshold Setting Using a New Approach Based on Otsu's Image Thresholding	Teymoor Ghanbari, Abbas Mehraban, Ali Aghaei	124-128
18	2022037671	An Agile Black-Out Detection and Response Paradigm in Smart Grids Incorporating IoT-Oriented Initiatives and Fog-Computing Platform	Hossein Shahinzadeh, Arezou Mahmoudi, Gevork B. Gharehpetian, S.M. Muyeen, Mohamed Renhouzid, Ersan Kahalci	129-136
19	2022033548	Accuracy and Speed Improvement of Microgrid Islanding Detection based on PV using FrequencyReactive Power Feedback Method	Ghasem Ghardashi, Soheil Maiidi, Maiid	137-144
20	2022037148	The Influence of Communication Channel on the Performance of Line Differential Protection	Peyman Jafarian, Hamid Eskandari	145-150

	21		Practical Test of Synchronization Relay	Hasan Abniki, Hashem Alipour, Mohammad Mostafa Keramat, Sajad Ansari, Hossein Askarian Abyaneh,	151-159
	22	2022033553	A modified integral method for differential protection of converter transformers	Mehran Yaghoubi, Hossein Askarian- Abyaneh, Ali Sahebi	160-168
Ī	23		A Novel and Practical Mathematical Equation for Design and Analysis of Lightning Protection System (LPS) Based on Rolling Sphere Method	Hamid Zamani, Maziyar Tajahmadi, Sadegh Jamali	169-175