

Home 19 More



Add new

Search

Conference Paper

Mathematical Model to Design an Optimal Natural Gas Pipeline Network: A Case Study in Mazandaran Gas Company

May 2011

Conference: 4th International Conference of Iranian Operations Research Society, At Guilan, Iran



Amir Mohajeri

8.65 · Islamic Azad University Central Tehran Branch



Saber Shiripour

13.25 · University of Garmsar



R. Tafazzoli

mazandaran gas company

Abstract

Here, we present an optimal gas network containing two layers (TBSs and consumer zones). An integrated mathematical program is proposed for optimizing the natural gas pipeline network. A mixed integer programming model is formulated to minimize the location-allocation costs in the network. Due to extent application of Minimum Spanning Tree (MST) technique in the network, we consider MST concept for the connectivity between TBSs. A case study in Mazandaran gas company in Iran is...

Do you want to read this conference paper?

Request full-text

Discuss publications directly with the authors and other experts by adding your comments here.



Citations 0

References 10

Comments Add yours

Similar research

OPTIMIZATION OF NATURAL-GAS PIPELINE SYSTEMS VIA DYNAMIC PROGRAMMING - REPLY

Article · Jan 1971 · IEEE Transactions on Automatic Control

 PJ WONG  RE LARSON

Request full-text

0 Comments 21 Citations






Welcome back, Roger. You can discover more new research directly from your feed.

Discover more

Not now

Article · Jul 2003 · Comptes Rendus Mecanique



 Evangelos Tentis  Dionissios Margaris  Dimitrios Papanikas

[Request full-text](#)

0 Comments 17 Citations

The minimum spanning tree problems in stochastic networks

Article ·



 He Fang-Guo  Qi Huan

[Request full-text](#)

0 Comments 2 Citations

31024 - Simulation of Transients in Natural Gas Pipelines

Article · Nov 1996 · SPE Production & Facilities

 Junyang Zhou  M. A. Adewumi

[Request full-text](#)

0 Comments 25 Citations

Simulation of non-isothermal transients in gas/condensate pipelines using TVD scheme

Article · Oct 2000 · Powder Technology

 Yulia Dukhovnaya  Michael A. Adewumi

[Request full-text](#)

0 Comments 11 Citations

Optimization of natural gas pipeline transportation using ant colony optimization

Article · Jun 2009 · Computers & Operations Research



19

Welcome back, Roger. You can discover more new research directly from your feed.

[Discover more](#)

[Not now](#)

Efficient operation of natural gas transmission systems: A network-based heuristic for cyclic structures

Article · Aug 2006 · Computers & Operations Research

 Roger Z. Ríos-Mercado  Seongbae Kim  E. Andrew Boyd

[Add full-text](#)

0 Comments 59 Citations

Min-degree constrained minimum spanning tree problem: New formulation via Miller–Tucker–Zemlin constraints

Article · Jan 2010 · Computers & Operations Research




 İbrahim Akgün  Barbaros Ç. Tansel

[Request full-text](#)

0 Comments 23 Citations

Mixed Integer Models for the Stationary Case of Gas Network Optimization

Article · Feb 2006 · Mathematical Programming

 Alexander Martin  Markus Möller  Susanne Moritz

[Request full-text](#)

0 Comments 141 Citations

Optimization of Natural-Gas Pipeline Systems via Dynamic Programming

Article · Nov 1968 · IEEE Transactions on Automatic Control

 Peter J. Wong  Robert E. Larson

[Request full-text](#)

0 Comments 115 Citations



19

Welcome back, Roger. You can discover more new research directly from your feed.

[Discover more](#)

[Not now](#)

© 2008-2017 ResearchGate GmbH. All rights reserved.

[About us](#) · [Help Center](#) · [Careers](#) · [Developers](#) · [News](#) · [Contact us](#) · [Privacy](#) · [Terms](#) · [Copyright](#) | [Advertising](#) · [Recruiting](#)



19

Welcome back, Roger. You can discover more new research directly from your feed.

[Discover more](#)

[Not now](#)