

基于多AGENT系统的电力合约市场协商平台框架研究

余顺坤, 袁家海

华北电力大学工商管理学院, 北京市, 昌平区, 102206

Study on Multi-agent Absed Trading Platform Contract Electricity Market

YU Shun-kun, YUAN Jia-hai

Business School, North China Electric Power University, Changping District, Beijing 102206, China

- [摘要](#)
- [参考文献](#)
- [相关文章](#)

Download: [PDF \(KB\)](#) [HTML \(KB\)](#) [Export: BibTeX or EndNote \(RIS\)](#) [Supporting Info](#)

摘要 提出了电力合约市场的实用化交易协商平台,由代表各自公司利益的智能体自动完成协商过程,该平台支持各智能体的自由协商。为满足该平台的实用化要求,进行了以下针对性设计:定义了智能体的协商策略,并设计了模糊控制遗传算法进行策略学习,使合约协商具有策略优化基础;针对合约市场协商的动态性和信息量大且不完全等特点,设计了灵活、鲁棒性强的可废止逻辑作为协商语言,并采用满足序列信息交换要求的POS语义作为智能体平台的通信协议。最后给出了智能体的设计实现思路。

关键词: [电力市场](#) [多智能体系统](#) [交易平台](#) [合约协商](#)

Abstract: The paper presents an evolutionary negotiation platform for power generating and power purchasing companies in contract market, which can support the free negotiation process as in real world. An intelligent agent implements the process by selecting a negotiation strategy based on learning mechanism. To realize the target of "applicability", some special designs are as follows: negotiation strategy which is the base of automated negotiation is defined and fuzzy controller genetic algorithm for strategy learning is proposed. Aiming at the dynamics and enormous incomplete information, defeasible logic that if of flexibility and robustness is proposed as negotiation language and Protocol Operation Semantic (POS) is utilized in the system as communication protocol to meet with the requirement of sequence information exchange. Finally the paper presents the architecture of the agent design.

收稿日期: 2005-06-01;

基金资助: 中华人民共和国教育部资助项目(111100019); 中国南方电网公司资助项目(CSPG[2003]PD005)

引用本文:

余顺坤, 袁家海. 基于多AGENT系统的电力合约市场协商平台框架研究[J] 中国管理科学, 2006, V(2): 117-123

Service

[把本文推荐给朋友](#)
[加入我的书架](#)
[加入引用管理器](#)

[Email Alert](#)
[RSS](#)

作者相关文章

[余顺坤](#)
[袁家海](#)

没有本文参考文献

没有找到本文相关文献