

**Memorandum of Understanding**  
**Between Jiangsu Provincial Economic & Trade Commission and**  
**the Natural Resources Defense Council (USA)**  
**on Cooperation in DSM Strategic Planning**  
**July 2004**

**江苏省经济贸易委员会与**  
**美国自然资源保护委员会**  
**DSM规划项目合作协议备忘录**  
**2004年7月**

Jiangsu Province is a leading economy as well as a leading energy consumer in China. It accounts for 10.3% of national GDP and 8.5% of electricity consumption in China. The Constraints in coal and power supply have been affecting the growth in Jiangsu, and are becoming major constraints on its economic development.

江苏省是中国的经济大省，也是能源消费大省。2003年，江苏省GDP和全社会用电量分别占全国的10.3%、8.5%。煤炭和电力供应紧张对江苏的发展产生了影响，并成为江苏省经济发展的主要制约。

As experienced by many developed countries in the world, Jiangsu is facing severe environment pollution as well as growing power shortages, largely resulting from its skyrocketing economic growth rate. In addition to considering new generation facilities and non-utility generation, it has become increasingly necessary for Jiangsu to aggressively pursue demand-side measures.

同许多发达国家一样，在经济快速发展过程中，江苏也面临环境污染和电力短缺压力。对江苏来说，除了考虑新增发电机组提高电力供应外，采取积极措施加强电力需求侧管理很有必要。

Well-established Demand Side Management (DSM) energy efficiency investment programs have been an effective means in the United States and other countries to capture zero-emission energy resources while satisfying the increased demand for electric power and reducing the need for new generation capacity, at costs well below these supply alternatives.

需求侧管理（DSM）能效投资项目是美国和其它国家追求能源零排放目标的一种有效手段。通过DSM能效项目，在满足电力需求不断增长的同时减少对新增发电容量的需求，且成本较低。

The central government of China has also acknowledged that DSM energy efficiency programs, which produce high benefit with inexpensive investment, are effective ways to cope with power shortages and reduce air pollution in the context that coal is still the major source of primary energy in China.

中国政府也意识到，DSM能效项目投资少、效益高，是在目前煤炭仍然是中国主要的一次能源的情况下，解决电力短缺和减少空气污染的有效手段。

The Jiangsu Provincial Economic & Trade Commission (hereinafter "JSETC" )is responsible for managing and coordinating electric power production and supply in Jiangsu. JSETC is also in charge of promoting energy efficiency, directing DSM work, establishing and carrying out the plan of new and renewable resources, regulating industrial pollution and promoting the development of the environmental industry in Jiangsu.

江苏省经济贸易委员会（英文简称JSETC）负责管理和协调全省电力生产供应，提高能效和指导DSM工作，制定并实施新能源和可再生能源计划，控制工业污染和促进环保型工业的发展。

The Jiangsu Electric Power Company (hereinafter "JSEPC") is the main body of DSM implementation in Jiangsu. JSEPC assists the government to establish DSM policy measures, planning, standard and is in charge of the implementation of DSM programs.

江苏省电力公司（英文简称JSEPC）是江苏省电力需求侧管理工作的实施主体，协助政府部门制订DSM的政策措施、规划、标准，负责需求侧管理项目的具体实施。

The State Grid Corporation DSM Instruction Center (hereinafter "SGCDC") is a national professional instruction organization under the leadership of the State Grid Corporation. It is responsible for DSM publicity and training, information dissemination, experience exchange, technology popularization and international cooperation. The purpose of SGCDC is to facilitate DSM development in the entire country with a view to national energy security and environmental–friendly sustainable development.

国家电网公司DSM指导中心（英文简称SGCDC）是在国家电网公司领导下的全国性专业指导机构，它负责DSM的宣传、培训、信息发布、经验交流、技术推广和国际合作。SGCDC旨在推进DSM在全国的发展，促进国家能源安全和环境可持续发展。

The Natural Resources Defense Council (hereinafter "NRDC")is a non–profit organization in the U.S. dedicated to the protection of the natural environment and human health. NRDC has played a significant role in DSM legislation and policy development in the U.S. and other countries for decades, and thereby has developed rich experience and expertise in DSM legislation, policy and mechanism development. Among other energy efficiency and environment protection efforts, NRDC has been

actively promoting DSM policy development in China at the central and provincial/municipal government level over the last several years.

美国自然资源保护委员会（英文简称NRDC）是美国的一个非盈利性组织，致力于保护自然环境和人类的健康。数十年以来，NRDC在美国和其他国家的DSM立法和政策完善方面，发挥了十分重要的作用，并且在DSM立法、政策和机制的完善方面积累了丰富的经验和专长，在其它能效和环境保护工作中，NRDC在过去几年里还积极地促进中国中央和省/市政府不断完善DSM的政策。

The China-U.S. Energy Efficiency Alliance is (hereinafter "EEA") is a non-profit organization in the U.S. dedicated to the promotion of market choices in China for technologies, products and services that are environmentally beneficial and energy efficient; to finding appropriate solutions to market barriers to widespread adoption of such technologies; and to fostering cooperative efforts among public and private entities to implement such solutions.

中美能效联盟（英文简称EEA）是美国的一个非盈利组织，致力于促进中国在节能环保技术、产品和服务方面的市场选择，寻找推动这些适用技术广泛应用的解决方案，并推动政府和企业就实施这些方案形成合力。

Optimal Energy is a six-person energy consultancy concentrating on energy-efficiency and renewable energy as resources for energy-service providers, and as competitive energy solutions for businesses and consumers. Optimal Energy specializes in assessing, developing, planning, startup, and management support for ratepayer-funded energy-efficiency programs and market-based energy products and services. Founded in 1996, its clientele includes utilities, consumer and environmental advocates, government and regulatory agencies, and energy-service providers.

Optimal Energy能源有限公司是一家包括六名员工的能源咨询公司，其工作重点在于将能效和把可再生能源作为一种资源为能源服务供应商、工商企业和用户提供可竞争的能源解决方案。Optimal Energy能源有限公司专门研究基于能效基金资助的能效项目以及基于市场的能源产品与服务的评估、开发、规划、启动和管理，它成立于1996年，顾客包括电力公司、电力用户、环保工作者、政府部门、监管机构以及能源服务供应商。

JSETC and NRDC agree that:

江苏省经贸委和美国自然资源保护委员会就以下几点达成共识：

Both JSETC and NRDC are committed to making joint efforts to improve upon supportive policies and mechanisms of DSM in Jiangsu. It is in their mutual interest to work together to develop and implement DSM mechanisms, policies, programs and legislation in Jiangsu Province on both a short- and long-term basis, with a view to overcoming immediate power shortages and reversing environment pollution arising from the inefficient use of power. Successful DSM programs in Jiangsu can serve as models for other provinces and cities.

江苏省经贸委和美国自然资源保护委员会共同承诺完善江苏DSM配套政策和机制。为了共同目标，双方在江苏合作研究、实施短期和长期的DSM机制、政策、项目和法规，解决电力使用效率低造成的电力紧缺和环境污染。同时，江苏成功实施DSM项目还可以为其他省市起到示范作用。

JSETC and NRDC wish to collaborate in order to build Jiangsu's capacity to (1) design, implement and evaluate DSM energy efficiency programs on a strategic scale which are as cost-effective and comprehensive as possible, and (2) create an effective regulatory framework for reviewing plans, recovering costs and rewarding success in demand-side investments.

江苏省经贸委和美国自然资源保护委员会希望通过合作使江苏省完成以下工作：(1)尽可能从成本效益和广泛性的高度设计、实施和评估DSM能效项目；(2)建立有效监管框架，评审DSM投资项目规划，评估成本回收和收益。

Both JSETC and NRDC intend to move ahead quickly because significant delays in implementing demand-side measures represent lost opportunities, which are costly, such as missing the chance to use energy efficient technologies on new buildings.

江苏省经贸委和美国自然资源保护委员会计划尽快启动该项目，因为如果推迟实施需求侧措施，就意味着丧失了机遇，这个代价是很大的，如对新建筑错过了使用高能效技术的时机。

JSETC and NRDC therefore agree to undertake a joint work program that includes, but is not limited to, the following elements:

因此江苏省经贸委和美国自然资源保护委员会同意共同开展该项目，其中包括（但不

仅限于) 以下几方面:

- JSETC and NRDC will jointly develop policy recommendation papers and technical/economic analysis reports for the Jiangsu Provincial Government to help the Jiangsu Provincial Government promulgate and implement a set of provincial – wide DSM regulations and measures aimed at capturing both short–term and long–term DSM opportunities in Jiangsu;
- 江苏省经贸委和美国自然资源保护委员会共同完成DSM政策建议和技术经济分析报告, 以帮助江苏省政府在全省发布和实施一系列DSM规章和措施, 寻求时机开展短期和长期的电力需求侧管理工作。
- JSETC will synchronize relevant provincial government bodies and utilities to join into a concerted provincial effort to develop, implement and enforce DSM legislation, policies and mechanisms in Jiangsu.
- 江苏省经贸委会同省政府相关部门和电力公司共同参与这项工作, 从而完善、贯彻和执行江苏DSM法规、政策和机制。
- A joint expert team will be set up by JSETC and NRDC to implement proposed short–term and long–term DSM projects;
- 江苏省经贸委和美国自然资源保护委员会将成立联合专家组来实施短期和长期DSM项目。
- The NRDC–JSETC expert team will work together on research and development of policy recommendations on such issues as: (1) the formation and operation of a specialized provincial DSM fund, (2) assessment of DSM opportunities in the industrial, commercial and residential sectors, (3) development and implementation of DSM programs designed to yield the maximum cost–effective savings achievable in key sectors of opportunity, and (4) resource allocation and regulatory practice;
- 江苏省经贸委和美国自然资源保护委员会专家组将对以下问题进行共同研究, 并完善政策建议: (1)省DSM专项资金的构建和运作; (2)评估工业、商业和居民住宅等进行DSM的潜力; (3)依据获取最大节电成本效益的原则, 开发和实施DSM项目; (4)资源分配和监管工作。

- The scope of the DSM program design process will include all aspects of program design, such as the type, structure and level of financial incentive and other (e.g. technical) assistance to be offered participants; marketing approaches aiming at segments of the target audiences; efficiency thresholds to determine eligible measures and equipment; administration, diagnostic and quality control procedures; the number and kinds of customers eligible to participate; and specifications, performance evaluation, protocols, and timing for process;
- DSM项目设计过程包括项目设计的各方面，比如类型、结构、财政激励情况及其它提供给参与者的帮助（如技术方面）；针对目标用户群的营销方法；措施和设备的能效要求；行政管理、诊断和质量控制程序；参与项目的用户类型和数量；工作规定、成效评估说明协议和时间安排。
- The DSM program design process will develop detailed plans for Jiangsu for its convenience of implementation. Jiangsu Provincial Economic Commission will retain the responsibility for program management and delivery, including interpreting preliminary results and suggesting mid-course corrections;
- 为便于实施，将制订江苏省DSM项目详细计划。江苏省经贸委承担项目管理和项目交付，包括项目初步结果以及项目中期修改建议。
- Resource allocation policy issues to be considered include determination of investment levels for individual measures and participants based on avoided costs; priorities for allocating funds between programs and determining overall spending on demand-side investments, and appropriate steps for allocating costs and benefits between and within customer classes that may be necessary to offset adverse impacts of demand-side programs on rates;
- 考虑资源分配的政策问题，包括基于规避成本确定每一项措施及参与者的投资水平；各DSM方案之间资金分配的优先顺序，以及确定DSM投资的总花费；在各类用户间和用户内分配成本和效益的适当步骤，从而抵消由于实施DSM方案而对电价产生的一些负面影响。
- NRDC will identify and organize successful and applicable DSM experience,

expertise and tools from the US and introduce such resources to Jiangsu;

- 美国自然资源保护委员会将挑选在美国成功的，且适合中国的DSM经验、专家和工具，并介绍给江苏。
- Optimal Energy and SGCDC will play critical roles in the joint expert group, including but not limited to technical and economic assessments of DSM efficiency programs targeting key markets, assistance with efficiency projects, developing recommendations and policy measures, technical assistance and training, etc.;
- Optimal Energy能源有限公司和国家电网公司DSM指导中心在联合专家组中将起到关键作用，包括但不限于以下几点：针对目标市场的DSM能效方案的技术经济评估，协助完成能效项目，提出建议和政策措施，技术援助和培训等。
- EEA will conduct activities in the United States and Jiangsu that advance the availability, timely distribution, and widespread use of advanced applicable energy efficient technologies in this province, and help with sustainable technology transfer to public and private sectors of demand-side management and market transformation policies and techniques in Jiangsu that implement energy efficient choices and solutions;
- EEA将在美国和江苏省开展工作，推动该省获得先进适用的节能技术、并及时广泛地开展应用；同时帮助持续地开展向政府和企业的DSM技术转让，并介绍实施节能方案的市场转型政策和方法。
- JSETC and NRDC will jointly exchange expert visits and study tours on DSM between Jiangsu and the US.
- 江苏省经贸委和美国自然资源保护委员会将就DSM工作在江苏和美国组织专家、研究团体进行互访。

Specific projects will be elaborated in Work Plan(s). Work Plans are subject to renewals and updates on a periodical basis in light of the development of DSM efforts in Jiangsu and evolving needs.

详细的计划将在工作计划表中阐述，工作计划将根据江苏省DSM工作进展的需要做周期性的补充和更新。

Each party agrees to undertake this work program to the best of its ability and according to the resources available.

协议双方同意采纳这个工作计划并根据可利用的资源发挥其最大作用。

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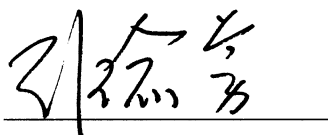
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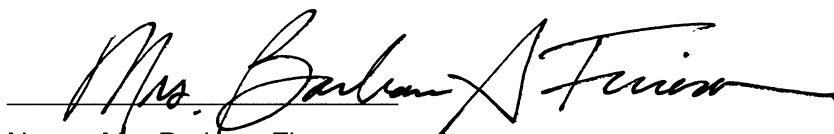
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