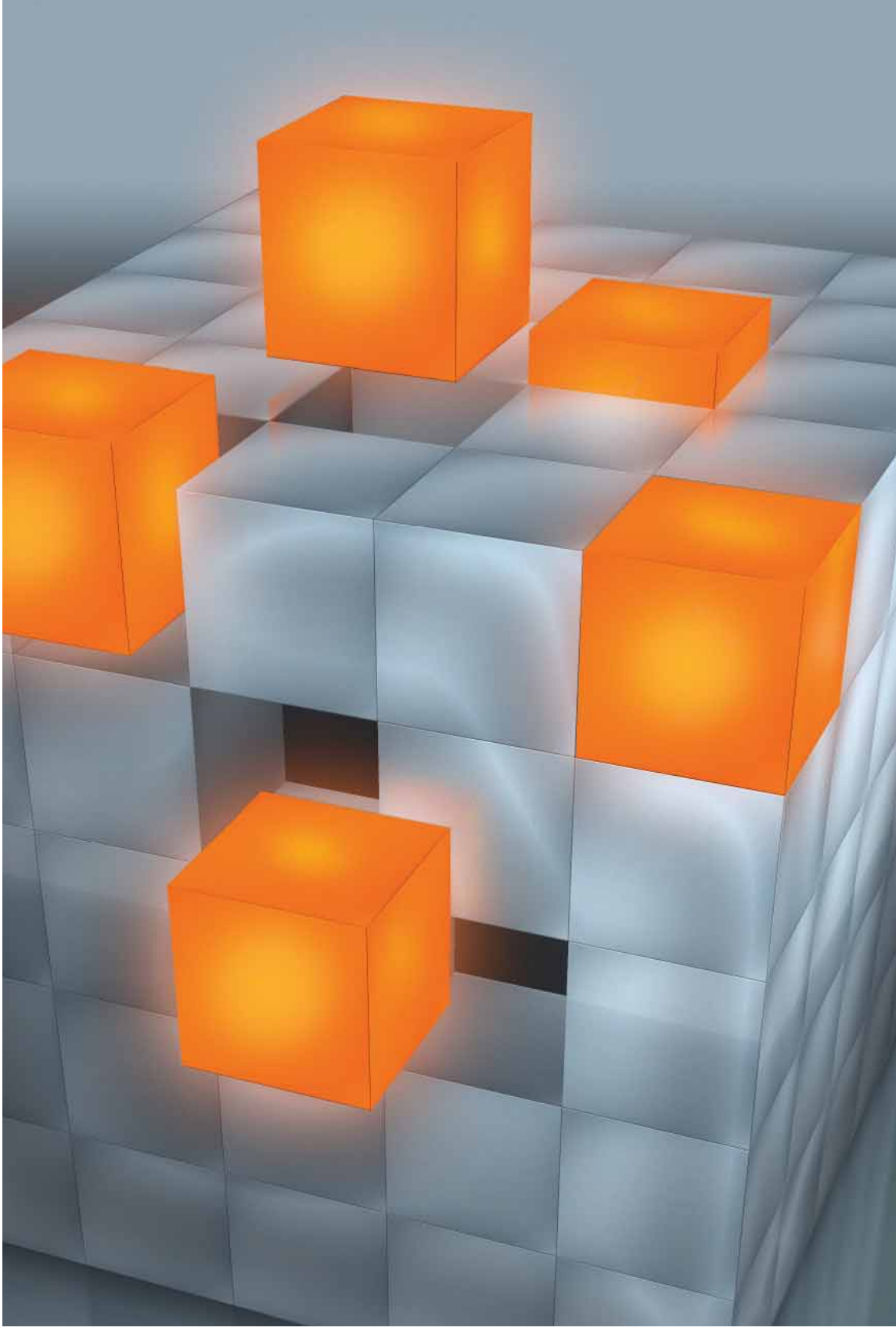

Main Electrical Vendor – a strategic partner for your success

Reduced overall costs thanks to intelligent concepts for your energy supply

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SIEMENS

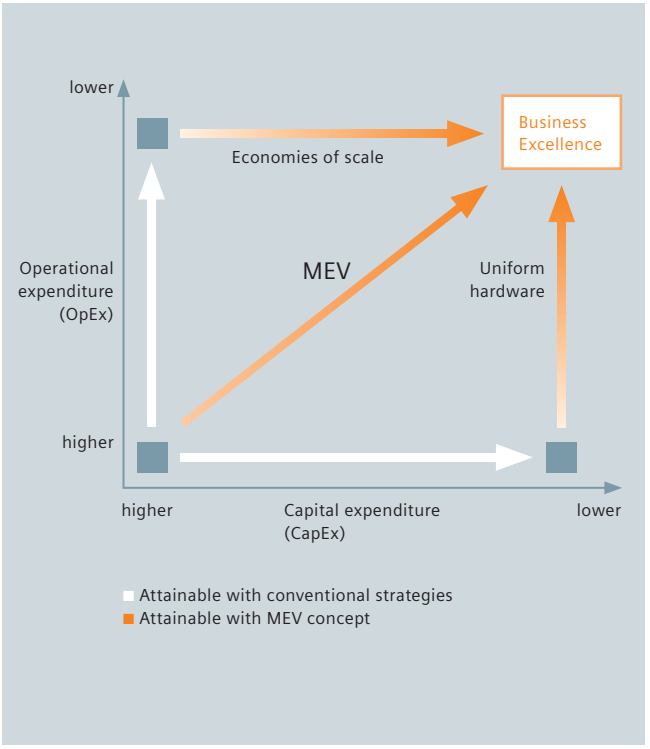
Main Electrical Vendor (MEV) concept

Cut costs, minimize risk, and ensure quality!

When you are planning a large project you award the implementation contract to a project management consultant (PMC). The PMC carefully reviews the entire project, plans it and issues tender documents for each individual part of the project. Each of these work-packages is handled by independent Construction Companies (EPCs). The EPCs in turn issue enquiries for each of the sub-projects contained in their package and hire sub-contractors to perform the work.

Wouldn't it be nice to optimize the cost/benefit ratio for your plant-power supply while minimizing risk, based on a carefully coordinated portfolio of high-quality products and services?

Under the Main Electrical Vendor (MEV) concept Siemens as a strategic partner defines with you the future plant operator, the entire spectrum of electrical equipment to be used in advance. This includes future maintenance, operations, and other services.



The heart of the MEV concept: the MEV book

All devices, systems and options are defined and described in detail in the MEV book and then linked in the pre-engineering phase to create ready-to-use subassemblies with tuned interfaces. This information also includes fixed prices and delivery times – a strategy that provides multiple benefits.

Minimizing risk – at every phase of the project

Prices, delivery times and detailed specifications for all necessary products and services recorded in the MEV book. That

- reduces complexity
- creates a clear framework for electrical engineering
- gives you fixed prices and deadlines for your projects.

Quality assurance – reliable down to the smallest detail

Precisely defined interfaces help prevent problems before they even appear. The systems are pre-qualified at the time they are ordered. Therefore they work perfectly with each other when in operation, which minimizes possible faults or failures at your plant later on. Simple operating processes also increase operational safety for your plant. During both production and maintenance activities your personnel can focus on just a few systems with similar interfaces.

Save time – with optimized processes from beginning to end

There is no need to coordinate dozens of suppliers. The companies doing the actual construction work (EPCs) order items out of the MEV book much as they would from catalog – there is no need for enquiries or negotiations.

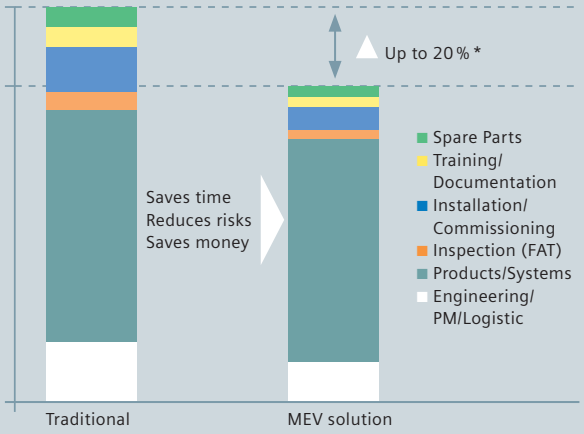
Cutting costs – from the initial investment to operating costs

The MEV concept allows you to profit from a much more cost-effective overall solution compared to traditional purchasing strategies that only pursue a partial optimization strategy.

Traditional strategies will

- either keep operating expenses (OpEx) down by purchasing high-quality equipment or
- reduce initial investment costs (CapEx) by purchasing lower-quality products. That might result in higher commissioning, operating, service and maintenance costs.

The MEV concept optimizes both capital outlay and operational expenses. Per-unit investment costs reduce as the required quantity increases. Our modular power distribution design using compatible components also allows you to expand or modernize your facility efficiently at any time.



*Source: based on customer feedback

Using the high-quality products mandated and defined in the MEV book also lowers operating expenses over the long term.

Standardization makes your operating processes
- more efficient
- allows your operators and maintenance personnel to concentrate on learning just a few systems with similar user interfaces
- requires less training time.

Standardized tools, processes, hardware and software ensure
- effective maintenance
- shorter service intervals
- lower investment assets due to less spare parts on stock.

With Siemens as your MEV you can achieve the economies of scale you are seeking – and the more complex the project, the greater the potential savings!

Advantages of the MEV concept:
- With Siemens as your MEV, you can focus on your most important responsibilities.
- Your project management consultant will negotiate only with the MEV on delivery terms, prices, and the scope of delivery for the individual products or systems.
- The MEV is able to quickly and flexibly implement any changes you wish to make to the plant design during the project avoiding costly and time consuming change orders and extensions.
- The EPCs order items from the MEV book much as they would from a catalog – there's no need for enquiries or negotiations.
- The MEV concept simplifies the interface engineering for the project as a whole and reduces overall time needed for processing and handling task.
- In future projects you can go back to the MEV book and utilize pre-defined plant parts and systems.

The MEV concept is the only solution that provides the best possible economies of scale during both construction and operation.

Success stories

MEV for petro-chemical project in Nanjing, China

Our experience begins at the power plant ...
... and doesn't end at the socket. As one of the world's largest electrical engineering company, we can offer more solutions and options for your industrial project than anyone else. And we are not limited to any specific branch. Our extensive experience means, we know the requirements for nearly any project down to the smallest detail, and we have the right products for your project – made with top Siemens quality and an optimized performance range for reliable and trouble-free operation.

All components from a single source
As the MEV, we provided BASF-YPC Company Ltd. (BYC) in China with the complete power supply systems for their new petrochemical complex in Nanjing, China. As part of our MEV book we used simplified communication interfaces to coordinate the work of nine multinational EPCs and their communications with the customer. We delivered all high voltage, medium voltage, and low voltage switchgears, transformers, and low voltage sub distributions, as well as the matching control and monitoring technology directly from our plants in China. The contract also included energy systems maintenance. Since the systems began operating in a total of six plants in mid-2005, they have been stable and have had no unscheduled shut downs.

The complete solution for all your needs
As the MEV for the DOW Corning Asian Third Pillar Project in Zhangjiagang, China, we supplied all power supply systems from 20 kV to 6 kV switchgear, power and distribution transformers and the plant itself, including an uninterruptible power supply. Our other responsibilities included extensive coordination of multiple involved parties and clarification of technical and business issues in order to create a goal-oriented collection of work packages to achieve an optimal end result for the customer. We also managed all relevant project documents and drew on our expert knowledge to provide optimal support for the plant construction companies, and thus the end customer as well.

A new plant – power supply by Siemens
We were awarded the MEV contract for the Olefine Project in Shuaiba, Kuwait, a joint venture of the Petrochemical Industries Company of Kuwait (PIC) and The DOW Chemical Company. With it we took over sole responsibility for supplying the entire range of electrical equipment to a total of six plant construction firms involved with the project. The primary benefit to the customer is the standardized energy supply concept that will deliver optimized Total Cost of Ownership (TCO) over the plant's lifecycle. Along with distribution transformers, low voltage switchgears, a diesel backup generator, and a great deal of secondary equipment, the scope of delivery includes power transformers and medium voltage switchgears for primary and secondary distribution.

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