



# Promoting Value Analysis (VA)

## General overview of VA activities

The Group is promoting Value Analysis (VA) activities as part of its efforts to achieve cost reduction targets toward BX (Building a robust corporate constitute) as set forth in its Medium-term Management Plan.

In July 2021, with strengthened procurement functions, we started cost structure reform efforts in cooperation with our operating divisions and suppliers.

VA is an approach that includes collaboration from the planning stage between not just our procurement and operating divisions but also suppliers and other parties involved to thoroughly examine efficiency improvement in expenses, repairs, and capital investment for each operating division from all perspectives along the supply chain.

For example, in procuring materials and equipment, contracted construction work, etc., we analyze the cost structure with a focus on the original function and purpose and discuss ideas from many different angles. This has led to waste elimination through specification review, equalization of the amount of materials, logistics improvement, etc., realizing minimized costs.

### Perspectives for cost reduction

Strategic perspective	Examples of viewpoints	Concrete examples
Change specifications	Change quantity	Examine closely to minimize man-hours required
	Change quality level	Reduce excessively demanding specifications
	Change method	Unify specifications among offices and with other companies
	Change special product to general-purpose product	Expand competitive orders through generalization
	Optimize life cycle cost, etc.	Cost evaluation and minimization throughout the life cycle
Change process	Change construction method	Simplified construction method, shortened construction period
	Change scope	Separation of materials and construction costs, integration of design and construction
	Change the timing of implementation	Avoiding demand concentration and periods of high prices
	Change request level, etc.	Relaxation of excessive quality requirements and supplier qualification levels

Change procurement method	Change purchasing method	Collective order, joint procurement, multi-year contract, etc.
	Change suppliers' competitive environment	Create competition, third-party, international procurement, etc.
	Work with suppliers to reduce costs	Cost reduction activities through collaboration
	Optimize supply chain	Total optimization of business process, including internal sales and outsourcing by group companies
	Strengthen bargaining power in price negotiation, etc.	Negotiation within assessed price range, comprehensive consensus building, etc.

## Concrete measures

### Example of cost reduction in maintenance services

Until now, the function of IT equipment used at our thermal power plants, such as general-purpose servers, has been ensured by renewal of equipment for which the manufacturer's warranty period has expired.

In considering the effective use of equipment beyond the manufacturer's warranty period, as a new initiative, we began to consider using a third-party maintenance provider (a company that provides services to prepare for possible failures by extending hardware maintenance periods after the manufacturer's warranty period expires).

In consideration of this, the Thermal Power Division and the Sourcing and Procurement Division collaborated to conduct research on third-party maintenance providers and technical investigation, and requested competitive quotes from multiple companies that were confirmed to have satisfied our required standards, achieving substantial cost reduction.

### Example of cost reduction through cost engineering\*1 by Kansai Transmission and Distribution, Inc.

Kansai Transmission and Distribution, Inc. undertakes cost engineering of procured products and engages in cost-cutting activities to achieve a win-win situation with suppliers. Through disassembly of equipment actually used and cost analysis based on a series of studies in line with the Sangen Principle (Three Actuals)\*2, the company identifies cost-cutting potential and proposes changes in component structure, specifications, materials, etc., to its suppliers. This also encourages our suppliers to make counterproposals, collectively achieving cost reduction, including changes in types of contracts and equalization of order quantities.

Kansai Transmission and Distribution, Inc. and the Company's Sourcing and Procurement Division will continue to work together with the aim of becoming the industry's top runner in cost engineering by utilizing internal and external knowledge.



Cost engineering workshop

- \*1 Cost engineering: Skills to analyze costs based on knowledge of the market, suppliers, product manufacturing and processes, and technologies owned by each division, etc., in order to identify cost reduction opportunities
- \*2 Sangen Principle (Three Actuals): An approach for solving problems involving observing the "actual thing" at the "actual site" and understanding the "actual situation"