

## Overview of Kawasaki Thermal Power Station

### 1. Overview of the power station

(1) Location: 5-1 Chidori-cho, Kawasaki Ward, Kawasaki City, Kanagawa Prefecture

(2) Station chief: Masatake Koseki

(3) Site area: Approx. 280,000m<sup>2</sup>

(4) Output: 2,128MW (Group 1: 500MW x 3 units, Group 2: 500MW x 1 unit, Group 1 gas turbine: 128MW x 1)

(5) Equipment overview at Groups 1 and 2

- Power generation system: 1,500 grade combined cycle (MACC)

- Thermal efficiency: 59% (Lower heating value)

- Gas turbine: Simple open cycle single shaft type

- Air compressor: Axial flow compressor

- Heat recovery steam generator: Triple pressure reheat natural circulation type heat recovery steam generator

- Steam turbine: Triple pressure reheat double flow exhaust condensing type

- Starting equipment: Thyristor starting method

- Generator: Horizontal shaft tubular type revolving field three-phase AC synchronous generator

- Smoke treatment facility

Exhaust gas denitrizer: Dry ammonia catalytic reduction method

Stack: 85m, 3 stack shell assembly type

(6) Fuel: LNG (Liquefied Natural Gas)

### 2. Construction history of Group2, Unit 1

July 1, 2009: Submitted the construction plan based on Article 48 of the Electricity Business Act

October 6, 2009: Construction commenced

May 13, 2012: Trial operation commenced (Initial synchronization)

February 1, 2013: Commercial operation commencement of Group 2, Unit 1

### 3. Construction plan of Group 2, Units 2-3

September 3, 2009: Submitted the statement of environment impact evaluation method

January 19, 2012: Submitted the statement of environment impact evaluation preparation

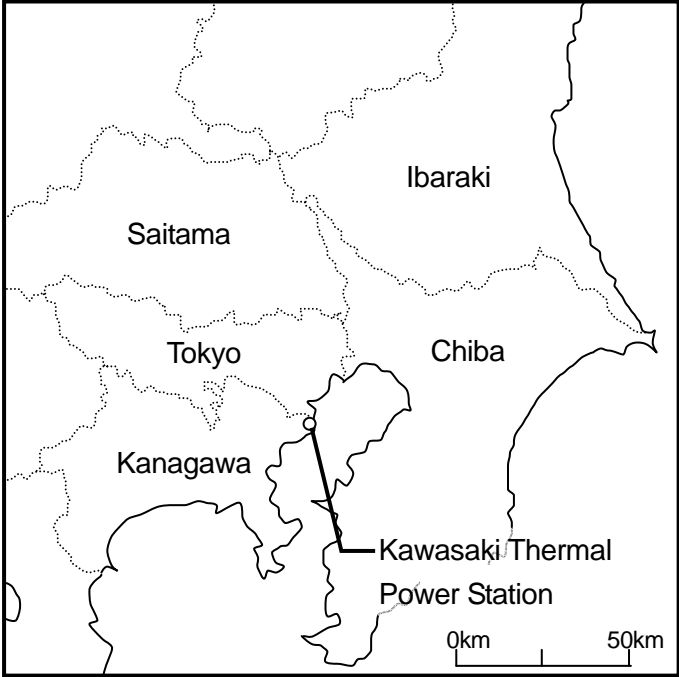
November 9, 2012: Submitted the environment impact evaluation report

November 28, 2012: Received a notification of finalization of the environment impact evaluation report

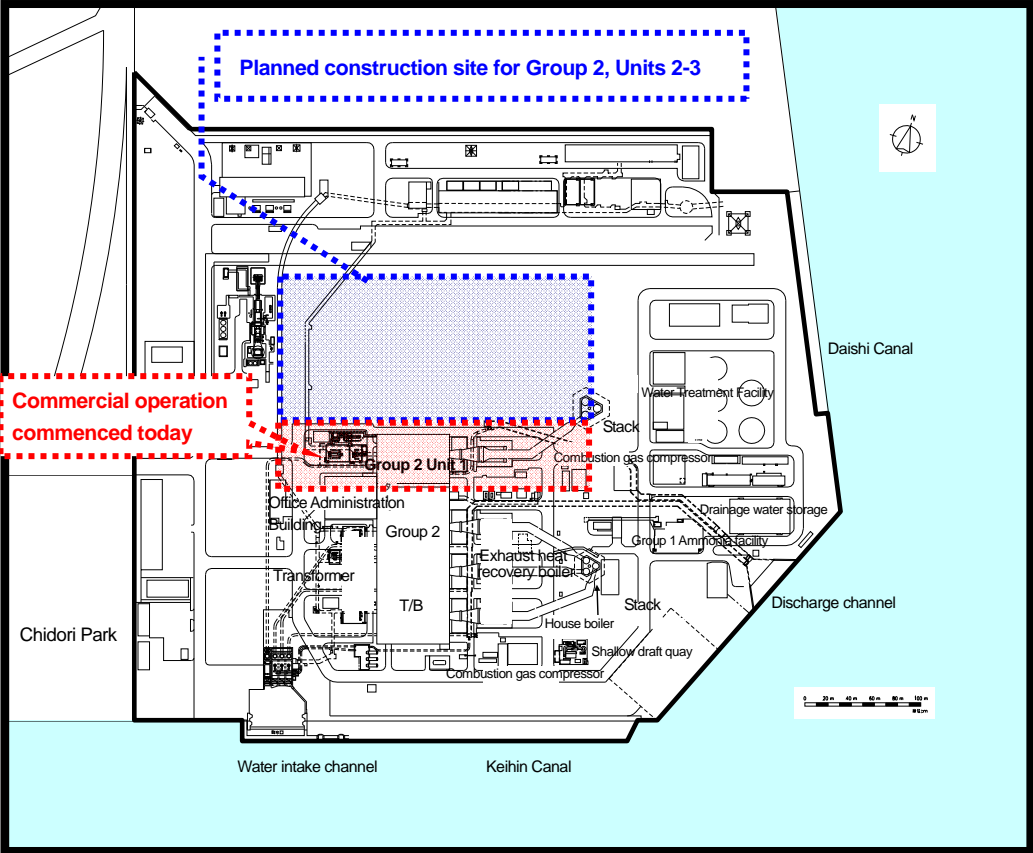
January 11-February 12, 2013: General inspection of the environment impact evaluation report

July 2016: Commercial operation commencement of Group 2 Unit 2 (Planned)  
July 2017: Commercial operation commencement of Group 2 Unit 3 (Planned)

4. Location of the power station



5. Power station map (Current)



6. Full view of the power station



(Photo taken in December 2012)

< Reference > Thermal efficiency improvement

