

Electric power condition of Wako campus in 2017

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The monthly electrical power consumption data for the RIKEN Wako campus (Wako) and RIKEN Nishina Center (RNC) and the energy supply by the cogeneration systems (CGSs) in 2017 are shown in Fig. 1. The average hourly electrical power consumption in each day for RNC in 2017 is shown in Fig. 2. The annual data of the electrical power consumption and energy supply in 2017 are listed in Table 1. The total electrical power consumption of Wako in 2017 was 153,800 MWh, which is 4% lower than that in 2016. The total electrical power consumption of RNC in 2017 was 73,694 MWh, which is 5% lower than that in 2016. When RI Beam Factory (RIBF) experiments using an uranium (²³⁸U) beam were conducted, the maximum electrical power supply to Wako from the Tokyo electric power corporation (TEPCO) reached 20.7 MW with a CGS output of 6.5 MW on June 1, 2017, and the maximum electrical power consumption of RNC reached 17.6 MW on June 2, 2017.

A complete overhaul of the gas turbine of CGS #1 after 4,000 hours of operation was performed from 28 August to 31 August, 2017.

A complete overhaul of the gas turbine of CGS #1 after 48,000 hours of operation is from 16 December, 2017 in progress, and is scheduled to be completed by 23 March, 2018.

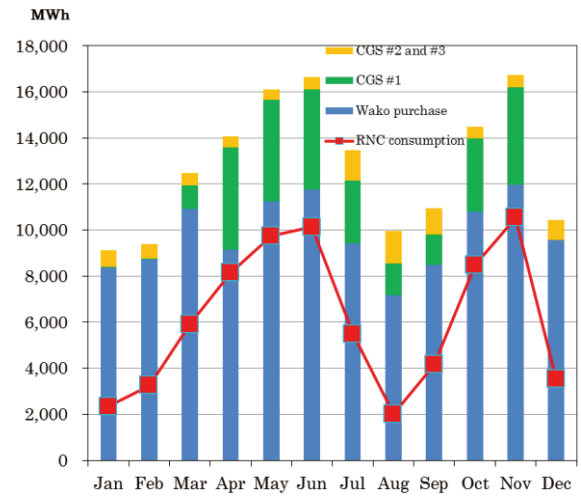


Fig. 1. Monthly electrical power consumption and energy.

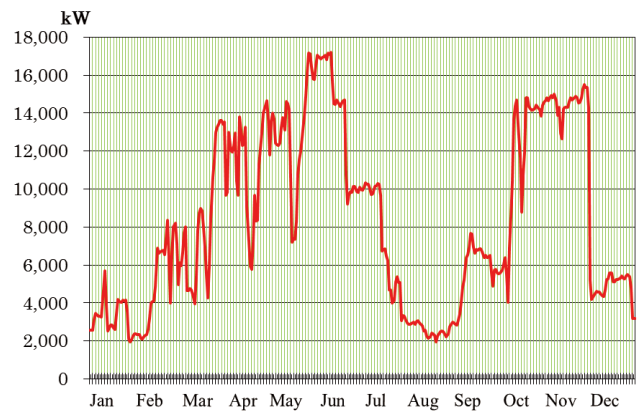


Fig. 2. Average hourly electrical power consumption in each day for RNC in 2017.

Table 1. Annual data of electrical power consumption and energy supply in 2017.

	Total (MWh)	Note	Percentage change form 2016
Wako purchase	117,524	Total electrical power supply to Wako from TEPCO	93%
Wako consumption	153,800	Wako electrical power consumption (CGSs + TEPCO)	96%
RNC purchase	46,570	Total electrical power supply to RNC from TEPCO	85%
CGS #1	27,124	CGS #1 total electrical power output	118%
CGS #2 and #3	9,152	CGS #2 and #3 total electrical power output	96%
RNC consumption	73,694	RNC total electrical power consumption	95%

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