

Division	Equipment class	Designation	Detailed specification	Quantity	Unit	Place of delivery	Expected order	Expected delivery	Subject matter
Hydraulic power	Pump water turbine	Exciter device	Exciter transformer	1	Set	Mazegawa Daiichi Hydroelectric Power Plant	2021/6	2023/5	Mazegawa Daiichi Hydroelectric Power Plant Unit 2, replacement of GOV, AVR, and others
Hydraulic power	Pump water turbine	Vertical shaft generator accessories, etc.	Air cooler, 8 units	1	Set	Hatanagi Daiichi Hydroelectric Power Plant	2021/12	2023/2	Hatanagi Daiichi Hydroelectric Power Plant, repair of Unit 2 pump water turbine/generator
Hydraulic power	Pump water turbine	Vertical shaft generator accessories, etc.	Generator air cooler	2	Units	Himekawa Daini Hydroelectric Power Plant	2021/10	2024/8	Himekawa Daini Hydroelectric Power Plant Unit 1/2, partial repair of pump water turbine generators
Hydraulic power	Pump water turbine	Generator bearing	Okumino Hydroelectric Power Plant, lower bearing remodeling supplies	2	Units	Okumino Hydroelectric Power Plant	2021/11	2022/11	Okumino Hydroelectric Power Plant Unit 1/2, bearing improvement
Hydraulic power	Pump water turbine	Governor (motor-operated)	Governor control panel 1/2, HV servo, etc.	1	Set	Dozuki Hydroelectric Power Plant	2021/8	2024/3	Dozuki Hydroelectric Power Plant Unit 1/2, replacement of governor
Hydraulic power	Pump water turbine	Governor (motor-operated)	Governor control panel, HV servo, etc.	1	Set	Yokokawa Hydroelectric Power Plant	2021/12	2024/4	Yokokawa Hydroelectric Power Plant Unit, replacement of governor
Hydraulic power	Pump water turbine	Governor (motor-operated)	Servo capacity 2 kW or more and less than 5 kW	1	Unit	Susukigawa Daiichi Hydroelectric Power Plant	2021/11	2023/9	Susukigawa Daiichi Hydroelectric Power Plant, repair of governor
Hydraulic power	Pump water turbine	Hydroelectric generator-related devices, minute inspection materials		1	Set	Mazegawa Daiichi Hydroelectric Power Plant	2021/6	2024/2	Mazegawa Daiichi Hydroelectric Power Plant Unit 2, minute inspection of pump water turbine/generator
Hydraulic power	Pump water turbine	Hydroelectric generator-related devices, minute inspection materials	Minute inspection/electrical parts replacement materials of liquid rheostat	1	Set	Okuyahagi Daini Hydroelectric Power Plant	2021/8	2022/6	Okuyahagi Daini Hydroelectric Power Plant, minute inspection of liquid rheostat
Hydraulic power	Pump water turbine	Hydroelectric generator-related devices	Generator repair supplies	1	Set	Mazegawa Daiichi Hydroelectric Power Plant	2021/6	2024/2	Mazegawa Daiichi Hydroelectric Power Plant Unit 2, repair of pump water turbine/generator
Hydraulic power	Pump water turbine	Pump water turbine-related devices, minute inspection materials		1	Set	Mazegawa Daiichi Hydroelectric Power Plant	2021/6	2024/2	Mazegawa Daiichi Hydroelectric Power Plant Unit 2, minute inspection of pump water turbine/generator
Hydraulic power	Pump water turbine	Pump water turbine runner	Vertical shaft Francis turbine	2	Units	Himekawa Daini Hydroelectric Power Plant	2021/10	2024/8	Himekawa Daini Hydroelectric Power Plant, replacement of pump water turbine runner 1/2
Hydraulic power	Pump water turbine	AC exciter (brushless)	Exciter capacity x 100 / N, 10 to 19	2	Units	Himekawa Daini Hydroelectric Power Plant	2021/10	2024/8	Himekawa Daini Hydroelectric Power Plant Unit 1/2, partial repair of pump water turbine generators
Hydraulic power	Pump water turbine	Horizontal shaft generator stator coil	2,700 kVA, integrated impregnating	1	Unit	Naga Hydroelectric Power Plant	2022/2	2024/3	Naga Hydroelectric Power Plant, replacement of generator stator
Hydraulic power	Pump water turbine	Liner, etc.	Thermal spraying	2	Units	Himekawa Daini Hydroelectric Power Plant	2021/10	2024/7	Himekawa Daini Hydroelectric Power Plant, repair of pump water turbine 1/2
Hydraulic power	Pump water turbine	Pump water turbines of other types	Pump water turbine repair supplies	1	Set	Mazegawa Daiichi Hydroelectric Power Plant	2021/6	2024/2	Mazegawa Daiichi Hydroelectric Power Plant Unit 2, repair of pump water turbine/generator
Hydraulic power	Pump water turbine	Guide vane repair supplies	Abrasion reduction shape	2	Units	Himekawa Daini Hydroelectric Power Plant	2021/10	2024/7	Himekawa Daini Hydroelectric Power Plant, repair of pump water turbine 1/2
Hydraulic power	Circuit breaker	154kV major transformer	6.6/154kV 30MVA	1	Unit	Minakata Hydroelectric Power Plant	2021/5	2023/7	Minakata Hydroelectric Power Plant, replacement of major transformer
Hydraulic power	Circuit breaker	Cubicle	Unit 3/4-related cub	1	Set	Okumino Hydroelectric Power Plant	2021/12	2023/7	Okumino Hydroelectric Power Plant, power plant construction for installation of meter for transaction of 2B and others
Hydraulic power	Circuit breaker	Cubicle	1GGCB 13.2kV 6000A	1	Unit	Takane Daiichi Hydroelectric Power Plant	2021/5	2022/12	Takane Daiichi Hydroelectric Power Plant, replacement of CB 1/2, etc.
Hydraulic power	Circuit breaker	Cubicle	2GGCB 13.2kV 6000A	1	Unit	Takane Daiichi Hydroelectric Power Plant	2021/5	2022/12	Takane Daiichi Hydroelectric Power Plant, replacement of CB 1/2, etc.
Hydraulic power	Circuit breaker	Cubicle	1GGCB 13.2kV 4000A	1	Unit	Takane Daiichi Hydroelectric Power Plant	2021/5	2022/12	Takane Daiichi Hydroelectric Power Plant, replacement of CB 1/2, etc.
Hydraulic power	Circuit breaker	Cubicle	2GGCB 13.2kV 4000A	1	Unit	Takane Daiichi Hydroelectric Power Plant	2021/5	2022/12	Takane Daiichi Hydroelectric Power Plant, replacement of CB 1/2, etc.
Hydraulic power	Circuit breaker	Cubicle	1GDS 13.2kV 5000A	1	Unit	Takane Daiichi Hydroelectric Power Plant	2021/5	2022/12	Takane Daiichi Hydroelectric Power Plant, replacement of CB 1/2, etc.
Hydraulic power	Circuit breaker	Cubicle	2GDS 13.2kV 5000A	1	Unit	Takane Daiichi Hydroelectric Power Plant	2021/5	2022/12	Takane Daiichi Hydroelectric Power Plant, replacement of CB 1/2, etc.
Hydraulic power	Circuit breaker	Cubicle	13.2 kV cubicle (2G)	5	Boxes	Hatanagi Daini Hydroelectric Power Plant	2021/5	2022/12	Hatanagi Daini Hydroelectric Power Plant, replacement of 13.2 kV cubicle (2G)
Hydraulic power	Circuit breaker	Cubicle	11 kV cubicle	1	Set	Iijima Hydroelectric Power Plant	2021/8	2023/2	Iijima Hydroelectric Power Plant, bulk repair of pump water turbine generators

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Hydraulic power	Circuit breaker	Cubicle	VCB, SC, SA, and instrument transformer	4	Boxes	Hiraoka Hydroelectric Power Plant	2021/8	2023/2	Hiraoka Hydroelectric Power Plant, installation of Class 4 switchgear and meter for transaction
Hydraulic power	Circuit breaker	Cubicle	Remodeling of cub (1G phase inversion)	1	Set	Takane Daiichi Hydroelectric Power Plant	2021/5	2022/12	Takane Daiichi Hydroelectric Power Plant, remodeling for installation of meter for transaction (1st term)
Hydraulic power	Circuit breaker	Cubicle	Remodeling of cub (unit 2 phase inversion)	1	Set	Takane Daiichi Hydroelectric Power Plant	2021/5	2022/12	Takane Daiichi Hydroelectric Power Plant, remodeling for installation of meter for transaction (1st term)
Hydraulic power	Circuit breaker	Cubicle	Remodeling of cub (primary power distribution 1/2)	1	Set	Takane Daiichi Hydroelectric Power Plant	2021/5	2022/12	Takane Daiichi Hydroelectric Power Plant, remodeling for installation of meter for transaction (1st term)
Hydraulic power	Circuit breaker	Station service cubicle	6kV cubicle, 9 boxes	1	Set	Miyagawa Daisan Hydroelectric Power Plant	2021/9	2023/9	Miyagawa Daisan Hydroelectric Power Plant, bulk repair of pump water turbine generators
Hydraulic power	Circuit breaker	Others, disconnecting switch	Opposite circuit breaker main body (including installation and adjustment)	2	Units	Okumino Hydroelectric Power Plant	2021/12	2023/7	Okumino Hydroelectric Power Plant, replacement of opposite circuit breaker of Unit 3/4
Hydraulic power	Circuit breaker	Others, disconnecting switch	Electric brake DS (including installation and adjustment)	2	Units	Okumino Hydroelectric Power Plant	2021/12	2023/7	Okumino Hydroelectric Power Plant, replacement of opposite circuit breaker of Unit 3/4
Hydraulic power	Switchboard	WCN (hydraulic control pane)	Sequencer, R-PI/O, and auxiliary	1	Set	Mazegawa Daiichi Hydroelectric Power Plant	2021/6	2024/2	Mazegawa Daiichi Hydroelectric Power Plant Unit 2, replacement of generator switchboard, etc.
Hydraulic power	Switchboard	WAUT (automatic hydraulic control device)	Common sequencer	1	Set	Mazegawa Daiichi Hydroelectric Power Plant	2021/6	2024/2	Mazegawa Daiichi Hydroelectric Power Plant Unit 2, replacement of generator switchboard, etc.
Hydraulic power	Switchboard	Automatic control device for hydraulic power	GOV control panel	1	Set	Gombo Hydroelectric Power Plant	2021/10	2023/1	Gombo Hydroelectric Power Plant, replacement of generator switchboard
Hydraulic power	Switchboard	Automatic control device for hydraulic power	AVR panel	1	Set	Mazegawa Daiichi Hydroelectric Power Plant	2021/6	2024/2	Mazegawa Daiichi Hydroelectric Power Plant Unit 2, replacement of GOV, AVR, and others
Hydraulic power	Switchboard	Automatic control device for hydraulic power	Governor control panel	1	Set	Mazegawa Daiichi Hydroelectric Power Plant	2021/6	2024/2	Mazegawa Daiichi Hydroelectric Power Plant Unit 2, replacement of GOV, AVR, and others
Hydraulic power	Switchboard	Integrated-type hydroelectric protection control device (C-2)	Protection control 1/2, AVR, and common monitoring	1	Set	Dozuki Hydroelectric Power Plant	2021/8	2024/3	Dozuki Hydroelectric Power Plant, replacement of control panel/protection panel
Hydraulic power	Switchboard	Integrated-type hydroelectric protection control device (C-1)	Ge protection control, second generation	1	Set	Miyagawa Daisan Hydroelectric Power Plant	2021/9	2023/11	Miyagawa Daisan Hydroelectric Power Plant, bulk repair of pump water turbine generators
Hydraulic power	Switchboard	Integrated-type hydroelectric protection control device (C-2)	Ge protection control, TC	1	Set	Gombo Hydroelectric Power Plant	2021/10	2023/1	Gombo Hydroelectric Power Plant, replacement of generator switchboard
Hydraulic power	Switchboard	Integrated-type hydroelectric protection control device (C-2)	Ge protection control, TC, AVR	1	Set	Hiroto Hydroelectric Power Plant	2021/11	2023/12	Hiroto Hydroelectric Power Plant, replacement of switchboard
Hydraulic power	Switchboard	Integrated-type hydroelectric protection control device (C-2)	Ge protection control, TC, AVR	1	Set	Susukigawa Daiichi Hydroelectric Power Plant	2021/11	2023/12	Susukigawa Daiichi Hydroelectric Power Plant, replacement of power generation board/switchboard
Hydraulic power	Switchboard	Integrated-type hydroelectric protection control device (C-2)	Ge protection control, AVR, TC	1	Set	Yokokawa Hydroelectric Power Plant	2021/12	2024/4	Yokokawa Hydroelectric Power Plant, replacement of control panel/protection panel
Hydraulic power	Switchboard	Integrated-type protection control device	Second generation digital (including maintenance support)	1	Set	Okudo Hydroelectric Power Plant	2021/6	2023/3	Okudo Hydroelectric Power Plant, replacement of generator switchboard
Hydraulic power	Switchboard	Integrated-type protection control device	Second generation	1	Set	Shiroyama Hydroelectric Power Plant	2021/12	2023/8	Shiroyama Hydroelectric Power Plant, replacement of switchboard
Hydraulic power	Switchboard	VOPSV (hydroelectric operation monitoring device)	Maintenance support device	1	Set	Mazegawa Daiichi Hydroelectric Power Plant	2021/12	2024/2	Mazegawa Daiichi Hydroelectric Power Plant Unit 2, replacement of generator switchboard, etc.
Hydraulic power	Switchboard	Switchboard	Hydroelectric generator protection panel	1	Panel	Mazegawa Daiichi Hydroelectric Power Plant	2022/3	2024/2	Mazegawa Daiichi Hydroelectric Power Plant Unit 2, replacement of generator switchboard, etc.
Hydraulic power	Switchboard	ST (station service)	DC loss protection panel	1	Panel	Mazegawa Daiichi Hydroelectric Power Plant	2022/3	2023/8	Mazegawa Daiichi Hydroelectric Power Plant Unit 2, replacement of generator switchboard, etc.
Hydraulic power	Others	Emergency generator, diesel type	150kVA	1	Set	Shiroyama Hydroelectric Power Plant	2021/5	2022/6	Shiroyama Hydroelectric Power Plant, replacement of switchboard
Hydraulic power	Others	Emergency generator, diesel type	550kVA	1	Set	Yokoyama Hydroelectric Power Plant	2021/5	2022/6	Yokoyama Hydroelectric Power Plant, replacement of power plant input/output relay panel, etc.
Hydraulic power	Others	Other winding machine attachments and components	Incline control panel	1	Set	Mazegawa Daiichi Hydroelectric Power Plant	2021/5	2022/9	Mazegawa Daiichi Hydroelectric Power Plant Unit 2, replacement of generator switchboard, etc.
Biomass	Others	Flue-gas denitrification catalyst	Vertical downward flow type	1	Set	Yokkaichi Biomass Power Plant	2021/6	2022/8	Yokkaichi Biomass Power Plant, repair of denitrification catalyst