

Hydroelectric Department Project Status Report
March 31, 2023

Priority Score	Project No.	Project Name	Description	Status	Comments	Current Year Budget	Budget Years	Facility	PM
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CIP Budgeted Projects

84	2094	Scotts Flat Spillway Repair and Upgrade	Studies and hydraulic modeling of favorite alternatives; design of modifications of spillway chute, chute walls, and the terminal energy dissipation structure; construction of the design.	Design	Design contract was awarded on January 25, 2023. Staff meet with DSOD staff to discuss upper plunge pool concerns that DSOD staff have. HDR will move forward starting design in lower spillway chute while the upper plunge pool concerns are addressed.	\$ 1,500,000	2017-2025	57901 - Scotts Flat Reservoir	DR
82	2655	Chicago Park Powerhouse Refurbishment	Replace or upgrade the existing turbine, main transformer, and their appurtenances. Replace deteriorated generator windings, insulation, poles, and other generator appurtenances. The last rewind was completed in 1991, and test results are showing signs of needing to complete another.	Planning	Hydro has received a draft report of findings from its consultant and has provided feedback on this report for revision. Additional flow and generation data is being provided in order to complete the uprate study.	\$ 2,500,000	2019-2025	57300 - Chicago Park Powerhouse	ND
75	2394	Rollins Powerhouse Relay Protection Upgrade	Upgrade protective relay system by removing original (1980's vintage) electro-mechanical relays and installing new programmable, multi-function relays and annunciators.	Design	NID has reviewed the 100% design package which has been submitted to PG&E for review and coordination. New protective relay settings are being developed by the consultant. Maintenance outages are progressing to make necessary modifications to the facility prior to construction during the annual plant outage in the Fall of 2023.	\$ 400,000	2019-2023	57400 - Rollins Powerhouse	ND
75	2392	Rollins Powerhouse Governor Upgrade	Replace or upgrade the existing governor and appurtenances.	Planning	Hydro is scoping the project and is discussing alternatives with several vendors. An RFP for the project will be released for the design phase of the project later in 2023.	\$ 150,000	2019-2024	57400 - Rollins Powerhouse	ND
75	2658	French Lake Low Level Outlet Gate Refurbishment	Repair or replace the hydraulic gate control system pending underwater inspection.	Planning	Hydro to begin project scoping in 2023.	\$ 200,000	2023-2024	57106 - French Lake	PN
73	2552	Scotts Flat Powerhouse Fire Detection Upgrade	Install new smoke and/or heat detection systems in the Scotts Flat Powerhouse that includes alarming and callout features to notify staff in case of fire while unoccupied.	Pre-Construction	The 100% design package has been accepted, and Hydro has ordered materials needed for construction in 2023. Planning for construction is underway.	\$ 30,000	2021-2023	57900 - Scotts Flat Powerhouse	TM

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73	2553	Combie North Powerhouse Fire Detection Upgrade	Install new smoke and/or heat detection systems in the Combie North Powerhouse that includes alarming and callout features to notify staff in case of fire while unoccupied.	Pre-Construction	The 100% design package has been accepted, and Hydro has ordered materials needed for construction in 2023. Planning for construction is underway.	\$ 30,000	2021-2023	57600 - Combie North Powerhouse	TM
73	2554	Combie South Powerhouse Fire Detection Upgrade	Install new smoke and/or heat detection systems in the Combie South Powerhouse that includes alarming and callout features to notify staff in case of fire while unoccupied.	Pre-Construction	The 100% design package has been accepted, and Hydro has ordered materials needed for construction in 2023. Planning for construction is underway.	\$ 30,000	2021-2023	57700 - Combie South Powerhouse	TM
73	2665	Deer Creek Powerhouse Communications Upgrade	Design and install a new microwave data link from KLOVE Tower/Deer Creek Powerhouse to Hydro HQ. Includes specifying hardware, design, and installation work.	Planning	The FCC has issued the District the licenses needed for the new microwave link from KLOVE tower to the Chicago Park Powerhouse. A bill of materials has been received and planning is underway for project implementation.	\$ 150,000	2023	57900 - Scotts Flat Powerhouse	TK
71	2597	Jackson Lake Toe Slope Protection Improvements	Design and construct stabilization measures to ensure the long-term stability of the toe slopes near the downstream outlet end.	Design	Hydro has submitted the 100% design to FERC for review and approval. The environmental permitting is also in progress to begin construction in 2023.	\$ 100,000	2021-2023	57105 - Jackson Lake	DC/LC
71	2581	Combie North Powerhouse Capacitor Bank Upgrade	Design and support the installation of a new capacitor bank for Combie North Powerhouse.	Design	Hydro has received the design package and bill of materials for a new capacitor bank for the Combie North Powerhouse. Procurement is underway with some materials now in hand. Construction is planned for 2023.	\$ 50,000	2021-2023	57600 - Combie North Powerhouse	TK
71	2544	Dutch Flat #2 Powerhouse Cooling Water System Upgrade	Upgrade the cooling water system at DF2PH and integrate this into the BOP PLC (existing is original, 1960's vintage). Replace analog gauges with new HMI screen, add new flowmeters and pressure transmitters, and replace piping.	Design	Mechanical and piping system layout complete and manifold is being fabricated. Long lead time materials are being ordered. Contract for electrical and control design support is in place. 50% design has been received and will be reviewed in early April. Construction scheduled for 2023.	\$ 300,000	2020-2023	57200 - Dutch Flat #2 Powerhouse	TH
70	2483	Dutch Flat #2 Powerhouse Backup Generator	Design and installation of new backup generator at Dutch Flat #2 Powerhouse.	Design	Design has been completed by consultants. A bill of materials has been developed. Bids for the new switchgear have been received. Engineering will move to procure necessary materials in 2023. Installation is planned for Fall of 2023 during the annual plant outage.	\$ 100,000	2020-2023	57200 - Dutch Flat #2 Powerhouse	TH

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69	2339	Rucker Creek Spill Gate Replacement	Replace existing radial gate at Rucker Creek Diversion with an overshot gate to improve personnel safety and operational performance.	Planning	Draft drawings and specifications for the new gate have been submitted to Hydro staff for review. Engineering will get proposal from gate manufacturer and confirm delivery dates once plans/specifications are final. FERC review of project design will be required prior to construction and will be coordinated by Hydro.	\$ 250,000.00	2019-2023	57207 - Rucker Creek Diversion	DR
69	2663	Dutch Flat Afterbay Hydraulic Line Refurbishment	Repair or replace the hydraulic gate control system pending inspection. Add lighting to the outlet tunnel to improve the safety of District staff operating the low level outlet valve.	Planning	Hydro has been preparing a bill of materials for replacement. Ordering will begin in March-April.	\$ 50,000.00	2023-2024	57301 - Dutch Flat Afterbay	PN
68	2432	New Hydroelectric Field Office	Complete office/building renovations, make repairs to the roof, install perimeter fencing, upgrade communications, and install a backup generator.	Planning	A contract has been established with an architectural design firm to prepare a layout for the new building. A kickoff meeting for this task was completed and Hydro is awaiting a conceptual layout plan. IT coordination has begun. NID Survey to complete site topo. Planning for other tasks (roof repairs, perimeter fencing, and communication upgrades) are underway.	\$1,950,000.00	2019-2024	57010 - Hydro Headquarters	ND
68	2598	Chicago Park Powerhouse Remote Terminal Unit Replacement	Specify, procure, and install new remote terminal unit (RTU) for Chicago Park Powerhouse to provide modern, onsite SCADA alarming.	Planning	A request a proposals for engineering design and integration support was released in February. Proposals are due in late March and will be reviewed in April. Contracting to occur thereafter.	\$ 400,000.00	2021-2023	57300 - Chicago Park Powerhouse	TH
67	2347	Combie North Powerhouse CAISO Meter	Purchase and install new CAISO meter and appurtenances in the Combie North Powerhouse.	Planning	Hydro has begun project scoping and held a kickoff meeting in March.	\$ 150,000.00	2019-2024	57600 - Combie North Powerhouse	TK/TB
64	6943	Combie South Powerhouse Access Road	Plan and design a new access road to the Combie South Powerhouse. Includes identifying necessary land acquisitions, completing survey and design work, and construction. Access road shall meet fire safe standards and will be secured with a new gate.	Pre-Construction	Construction contract approved on 1/11/2022. Final approval/signatures from property owners pending. Construction anticipated in April/May 2023. Fire clearing RFQ to be sent out for brush clearing.	\$ 250,000.00	2019-2023	57700 - Combie South Powerhouse	AS
62	2576	Fall Creek Diversion Flume Improvements	Replace flume sheets and associated hardware.	Planning	Project materials were purchased and delivered in 2022. Construction is planned for the 2023 annual outage in June.	\$ 150,000.00	2021-2024	57205 - Fall Creek Diversion	PN