

the

light report



October 2003

Volume 7; Number 10

Superintendent's Summary

A new water year has just begun in our hydroelectric watersheds. For City Light and other hydropower-based electrical utilities in the Pacific Northwest, the water year begins Oct. 1 and runs through Sept. 30.

We're all hoping that the new water year is much wetter than the one that just ended. The Skagit River watersheds received only 0.79 inches of rain for all of June, July and August. The flow of the Skagit River into Ross Reservoir averaged 1,186 cubic feet per second in August and 748 cfs in September, the lowest flows in those months since record keeping began in 1909. The Skagit watersheds ended the year at 72 percent of normal and Boundary at 86 percent.

Fortunately, after a very dry October, November and December last year, we began to save water at Ross Reservoir. Usually, we draw Ross down during the winter months and count on the spring runoff to refill it. This past winter, we kept Ross about 35 feet higher than normal to help ensure refill in the summer. It cost us some surplus sales revenue but left the utility and the fish in good shape for the fall and winter. There is no question that we will be able to protect fish and meet retail demand this winter.

Most long-range forecasts are calling for near-normal precipitation during the '03-'04 water year. We will be paying close attention to the forecasts as the water year begins. This fall we will begin to track snowpack data from automated measuring sites called Snotels, and we will take our own snowpack measurements beginning in January.

We invite you to keep track of water conditions in our watersheds at <http://www.cityofseattle.net/light/ctracks.html>.

Jim Ritch, Acting Superintendent

Pink Salmon making a record comeback in the Skagit River

City Light's careful dam operation and environmental work continues to be rewarded on the Upper Skagit River.

More than two million Pink salmon are now returning to the river, and 80-90 percent of them will spawn in the 27-mile reach of river just downstream from our dams.

This year's run continues a remarkable comeback for the species since heavy flooding in 1995. Millions of eggs were destroyed that year, and only 60,000 Pinks returned to the Skagit during the next run in 1997. The Pinks have been on a roll ever since, hitting about 300,000 in 1999, about 900,000 in 2001, and the estimated 2 million this year – potentially the highest number of returning Pink salmon on the Skagit in four decades.

City Light manages water flows for fish protection. This very dry year has been especially challenging. But we kept Ross Lake at higher levels during the winter and were able to refill the reservoir this spring, in spite of below-normal precipitation. The result is a spectacular salmon run and plenty of power.

The salmon nests or "redds" are currently receiving enough water for the eggs to survive. In previous years, the utility has voluntarily released additional water into the river to preserve habitat for spawning populations. The Upper Skagit remains a unique example of how a watershed can produce reliable power and healthy salmon runs. In May, City Light's Skagit Project became the first large hydropower project in the nation to be certified "Low-Impact" by the independent Low Impact Hydropower Institute.

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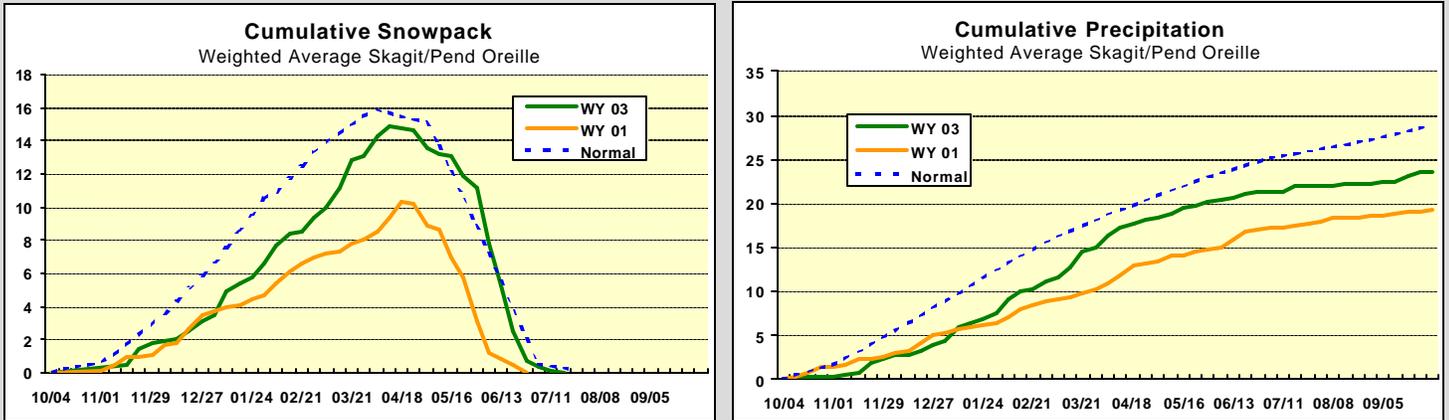
Energy NewsData

City Light has purchased a blanket subscription to Energy NewsData Service's family of publications covering US and particularly western electricity issues. Access is for City employees only.

Councilmembers, staffers and others may sign up for e-mail delivery of any or all of these publications.

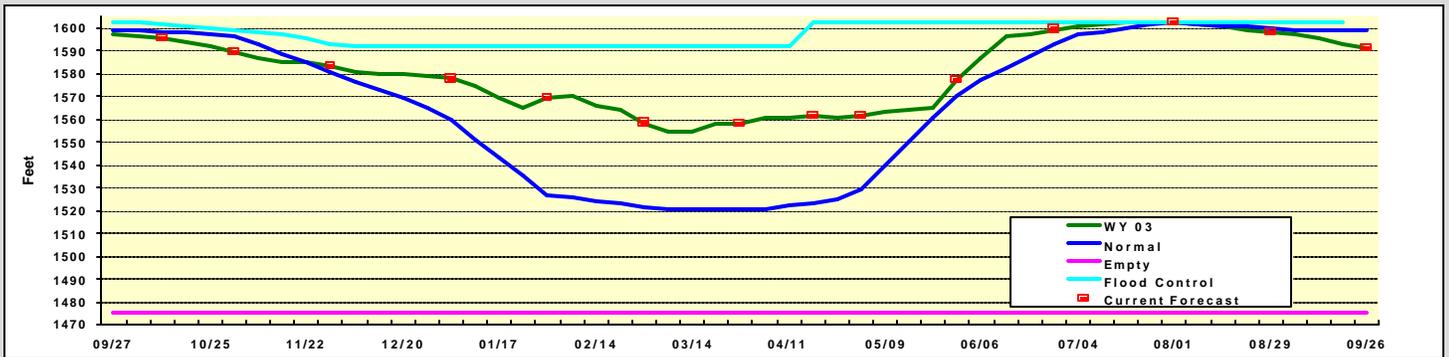
For more information and to subscribe, go to <http://sclinweb/energyNewsData/>

- Water Resources as of September 26, 2003 - Snowpack and Precipitation



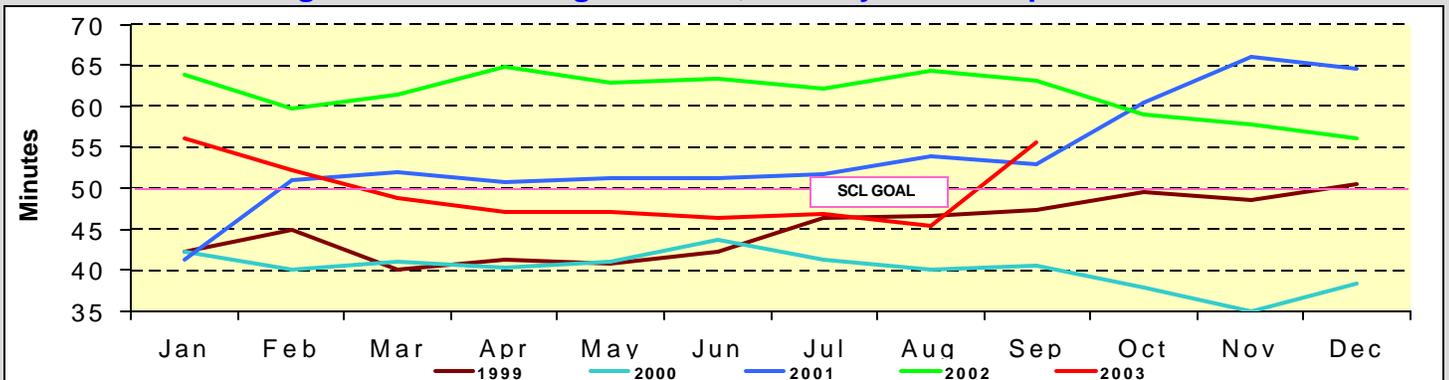
The weighted average of the Cumulative Precipitation of both watersheds for the period between October 1, 2002 and September 26, 2003 of the current Water Year 2003 (WY 03) has reached 23.6 in. or 82% of normal which compares to 19.2 in. or 66% of normal for the same time in Water Year 2001(WY 01). The Cumulative Snowpack of both watersheds had reached a season high of 14.8 in. for this Water Year versus 10.4 in. in the 2001 Water Year.

Ross Reservoir Levels



We have achieved our goal to keep Ross at 1598 feet through Labor Day. This level allows for full access to all docks, campsites and other recreational facilities. Our next goal is to maintain Ross above 1565 feet through October to ensure access for spawning Bullhead Trout to tributary streams.

- System Reliability - Average Customer Outage Minutes, January 1999 – September 2003



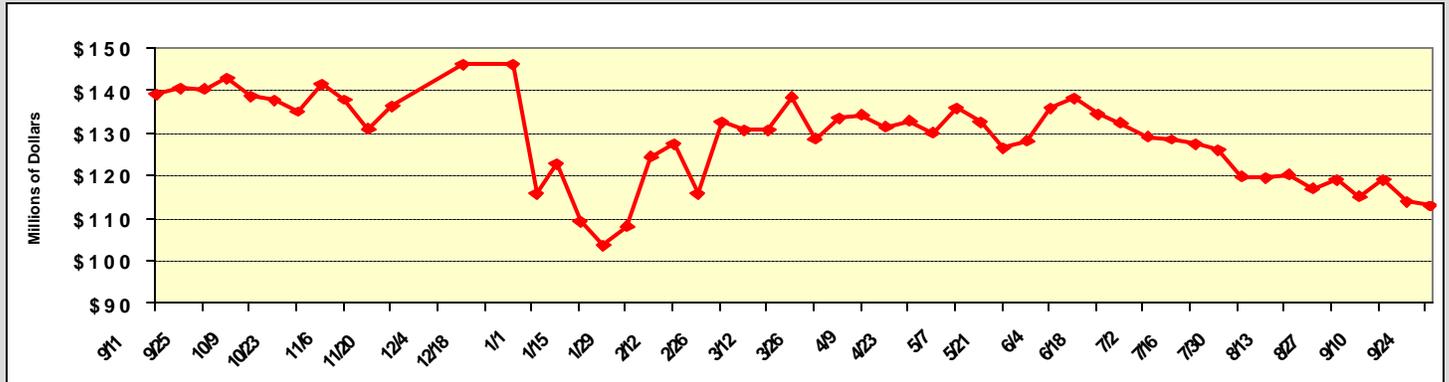
We The System Average Interruption Duration Index (SAIDI) jumped by 10.2 minutes for September. More than 9 minutes of this increase is a result of the dry summer and occurred in the Duwamish industrial area. Unusual levels of dust and other airborne contaminants accumulated on pole-top insulators. Light rains on September 7th and 10th mixed with the accumulated dirt and grime leading to flashovers which in turn caused pole fires and other equipment damage. The close proximity of these outages limited our ability to switch customers to adjacent energized feeders. In addition, a private construction crane contacted energized overhead lines in the South Lake Union area on September 25th, contributing about 2/3 of a minute to SAIDI.

- Markets and Power Management - Forward Power Prices, Current vs. Operating Plan (as of 9/22)

	High Load Hours			Low Load Hours		
	Operating Plan	Current	Change	Operating Plan	Current	Change
Jan 03	\$40	\$40	\$0	\$32	\$32	\$0
Feb 03	\$35	\$74	+\$39	\$30	\$70	+\$40
Mar 03	\$34	\$24	-\$10	\$28	\$21	-\$7
Apr 03	\$34	\$32	-\$2	\$24	\$30	+\$6
May 03	\$26	\$32	+\$6	\$16	\$22	+\$6
Jun 03	\$24	\$41	+\$17	\$16	\$33	+\$17
Jul 03	\$37	\$49	+\$12	\$25	\$39	+\$14
Aug 03	\$46	\$45	-\$1	\$31	\$37	+\$6
Sep 03	\$39	\$40	+\$1	\$27	\$32	+\$5
Oct 03	\$42	\$40	-\$2	\$31	\$33	+\$2
Nov 03	\$40	\$42	+\$2	\$30	\$34	+\$4
Dec 03	\$44	\$47	+\$3	\$35	\$38	+\$3

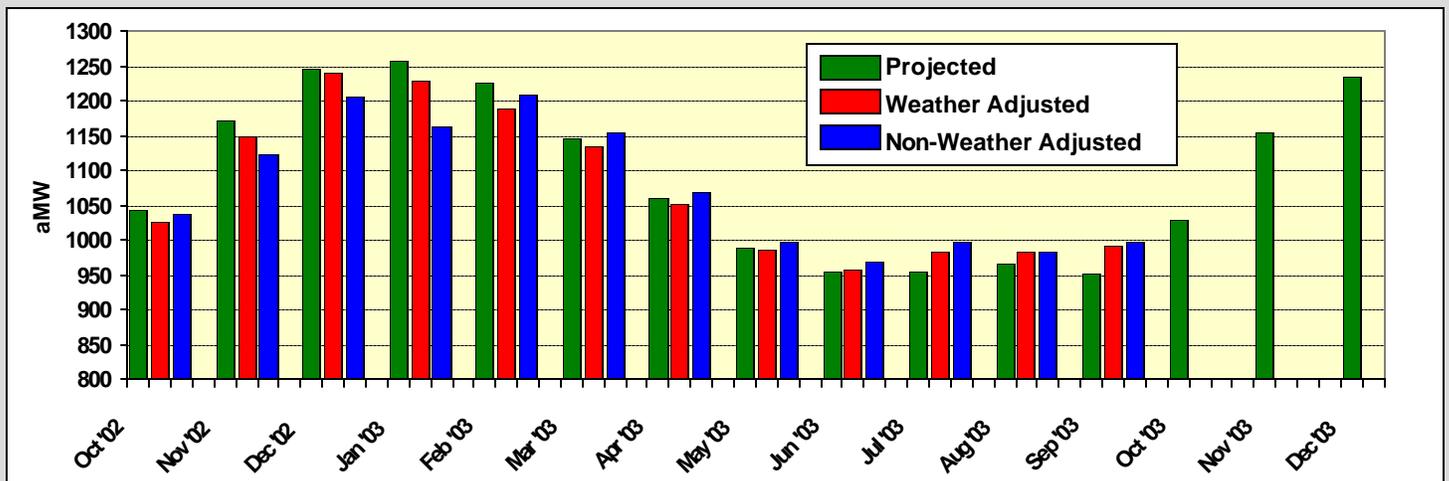
This table compares the forward prices for energy as of September 22, 2003 with the forward prices assumed in the October 2002 operating plan.

Market Value of 2003 Position (as of 9/22)



The projected value of the 2003 net wholesale revenues has eroded over the last few weeks because of steadily worsening long-range forecasts flows in the fourth quarter. Retail demand is also up, reducing the amount of energy available to market. While the former is bad news for our overall revenue, the latter is good news.

Load History and Projections



The increase in load observed in July and August continues. Even so, weather adjusted load for September is still 4% lower than its previous high of 1029 aMW in 2000.

Later this fall, when Chum and Coho salmon enter the river, we will be able to see the results of an exciting habitat project. City Light has just completed restoration of a major new spawning channel near Marblemount.

Working with an existing flooding channel that had been cut off from the river's mainstream, City Light enlarged it, deepened it, created spawning habitat and then reconnected it to the river. Pinks don't spawn in side channels, but about 1,000 Coho and Chum salmon are expected to use it in November, December and January. Those fish will probably produce tens of thousands of fry that will use the channel for over-wintering.

Ultimately, this work will help enhance the natural runs of those species in the river.

Bits and Pieces: News and Notes from City Light and the Utility Industry

- **Outages:** This summer's extended dry spell allowed substantial amounts of dust to accumulate on pole-top insulators. When this dust combines with the first light rains, insulator flash-overs can be caused, sometimes leading to pole fires or other equipment damage and electricity outages. Proximity to salt-laden marine air and extended dry periods increase the risk of customer impacts. City Light's Power Stations Division performs insulator cleaning at substations, when necessary. On September 7 and 10, about six such incidents led to a combined SAIDI impact of over nine minutes, pushing SAIDI from 45.5 to over 55 (50 or less is our target).
- **Kate Riley, Seattle Times,** visited the Skagit on October 1 to observe the salmon runs and meet with Dave Pflug, our fisheries biologist. We also anticipate television coverage of the salmon next week.
- **BPA:** Potential settlement of the residential exchange continues to be the talk of the region. Lawyers are drafting the appropriate documents – we expect them to be ready next week - then the 120-day process for approval will begin. We will be prepared with a public communications plan for use when BPA makes an announcement.
- **We signed an agreement with the BPA for \$25 million** over the next three years to support conservation programs.
- **Sound Transit:** We completed the analysis of electrical services to Sound Transit based on the information they have provided. The costs of electrical infrastructure for capacity and service connection include redundancy and reliability over-and-above normal, as requested. We will review the analysis with Sound Transit.
- **Project Share:** City Light's customer-funded assistance program has been accepted as a Combined Charities program. Project Share needs more contributions, as current needs exceed income. The higher winter rates start in Octo-

ber and we anticipate that Project Share funds will be in even greater demand.

- **Congressional negotiators** are weighing House and Senate proposals to include dozens of tax breaks for industries in pending energy legislation, even though they could add as much as \$19 billion to the federal budget deficit in the next decade. Republican lawmakers, trying to reconcile the House and Senate versions of the far-reaching energy legislation, say the tax proposals are part of a well-rounded package of incentives to make the U.S. energy system more self-sufficient and reliable. The provisions, they say, would encourage more domestic oil and gas production, promote the development of alternative fuels and persuade electric utilities to invest more money to improve overburdened transmission systems.
- **Tacoma power users** will get at least a four-month reprieve on a 4 percent rate hike that was scheduled to take effect Oct. 1. In a complex maneuver tied to litigation still being contested, the Public Utility Board voted to stave off the increase pending the outcome of the case, said Tacoma Power Superintendent Steve Klein.
- **The New York blackout of Aug. 14** has created a call to action for "smart" energy companies in Washington State. Smart energy is a broad term for an emerging high-tech sector that's working to reduce the load on America's antiquated electrical grid -- without building more power plants or creating more pollution. That can include making hydrogen-based fuel cells, such as Bothell-based Neah Power Systems Inc. and Spokane's Avista Labs are doing, or putting chips in home appliances that would automatically shut off in a brownout -- something the Pacific Northwest National Laboratory is currently studying at Hanford.
- **Office of Economic Development Event:** Dave Smith, Director of South Electric Service, spoke about security and pedestrian lighting programs at a kick-off event for the third edition of OED's "Create A Thriving Business District, A Guide to City and Neighborhood Business District Resources." This guide will be a valuable resource to small businesses and new industries in Seattle. The guide is posted on the Web at http://www.cityofseattle.net/economicdevelopment/biz_district_guide/thriving_biz_district.htm



City Light communications group has completed negotiations with Comcast to air public service spots promoting Green Power sign-ups. The spots will run in November and December 2003.

UPCOMING COUNCIL AGENDA ITEMS

Meetings of the Energy and Environmental Policy Committee have been cancelled through the month of November to accommodate the Biennial Budget Process schedule. Meetings will resume in December 2003.