Over the next ten years, City Light will make important resource and I-937 compliance choices. These choices commit hundreds of millions of dollars of customer funds and affect future operating costs, operating reliability, and the city’s environmental footprint for decades to come. The Integrated Resource Plan (IRP or ‘the plan’) is a key forum for considering the options and consequences of the choices.

As a publicly-owned utility, public input into the plan is critical. Involving stakeholders in the 2010 IRP development process can make the plan more responsive, produce more meaningful results, and promote understanding and support for important long-term resource decisions. The public involvement program for City Light’s 2010 IRP provided opportunities for participation by customers and other local stakeholders, as well as representatives of groups that have expertise on various aspects of the regional electric power system.

Key objectives for public involvement in City Light’s 2010 IRP process were:

- Involve customers, regional experts and other stakeholders during the entire IRP process.
- Integrate the public involvement program with analytical activities for the IRP, by including opportunities for stakeholders to review and comment on various inputs and analyses.
- Actively promote two-way communication, group learning and consensus building.
- Gather, balance and incorporate a broad spectrum of perspectives, ideas and suggestions.
- Use multiple communication channels to provide several ways for members of the public to learn about City Light’s 2010 IRP process and to provide input.

Overview

This appendix summarizes how public input was gathered and used in the developing City Light’s 2010 IRP. Many methods were used to encourage City Light customers to understand and have an impact on the resource mix for the utility’s future energy needs. During 2009 and 2010, input was gathered from the public as well as City Light employees, using a variety of methods. Activites included:

- Consultations with the Seattle City Council Energy and Technology Committee and Mayor’s staff
- Six stakeholder meetings (guests included)
- Email notification
- City Light web site announcements
- Three public meetings
- Email notification of community groups
- Stakeholder members notification
- Telephone notification
- Newspaper ads
- Internal employee communication
- Energy, Technology, and Civil Rights Committee presentations broadcast on the Seattle Channel
- A Light Reading issue inviting people to comment
- Bill insert mailed to all City Light customers
- An IRP link from City Light’s home page to keep people up to date and a specific email address so they could ask questions and/or make comments and suggestions
- Email responses
- Telephone

The purposes of public involvement were to:

- Gather input regarding long-term resource choices
- Inform stakeholders of the IRP process and ask for input and guidance
Inform the general public about resource options and gather their comments and questions

Raise awareness of the importance of long-term planning and City Light’s need for additional resources and renewable energy credits beyond their current resource mix

City Light’s web page and public meeting schedules were advertised. PowerPoint presentations are available online at http://www.seattle.gov/light/news/issues/irp/.

Each of the major types of public involvement are described below.

Stakeholder Group

One of the primary vehicles to promote broad public involvement in City Light’s 2010 IRP was working with an IRP Stakeholder Group. The IRP Stakeholders are an advisory group. They have diverse backgrounds, and the stakeholder meetings provided a forum for their participation throughout the IRP process.

The Stakeholder Group includes representatives of City Light’s retail electric customers and other local stakeholders, along with experts drawn from several groups that are actively involved in regional energy issues.

Staff from the Mayor’s office and the City Council were invited to attend and participate in the group meetings. All group meetings were open to the public.

The meetings were designed to enable City Light staff to work directly with the IRP Stakeholder Group. Each meeting typically began with presentations on one or more topics by City Light staff, followed by interactive group discussion. While the IRP Stakeholder Group is a valuable source of ideas and suggestions, it does not have formal policy-making responsibilities.

Stakeholders

Invited members and their affiliations are listed below:

- John Chapman, University of Washington
- Stuart Clarke, Bonneville Power Administration
- Danielle Dixon, Northwest Energy Coalition
- Tom Eckman, Northwest Power and Conservation Council
- Mike Hansen, Sabey Corporation
- Hamilton Hazelhurst, Vulcan Development, Inc.
- Pam Jorgensen, Harborview Medical Center
- Steven LaFond, Boeing Company
- Henry Louie, PhD, Seattle University
- Christy Nordstrom, Residential Customer
- Mike Ruby, Envirometrics
- Scott Rusch, Fred Hutchinson
- Richard Sebastianelli, LaFarge North America
- Jennifer Sorensen, PhD, Seattle University
- Jonathan Stine, Renton Schools
- Pat Zemtzov, Volunteer, Cascade Chapter, Sierra Club

Invited staff were:

- Tony Kilduff and Dan Eder, City Council Staff
- Calvin Chow, City Budget Office

Stakeholder Meetings

Six Stakeholder meetings were held, usually from 4:00 PM to 6:30 PM. Dates and main topics are listed below. More detailed information, including presentation materials, is online at http://www.seattle.gov/light/news/issues/irp.

April 16, 2009. The meeting was kicked off with a greeting by Steve Kern, Power Supply and Environmental Affairs officer. Next, the City Light IRP Team was introduced. There was a discussion of the role of Stakeholders in the IRP. An overview of integrated resource planning was presented, including the schedule, and key points in the IRP process for Stakeholder input. In addition, key assumptions about the planning environment were discussed.
June 25, 2009. The June meeting began with a brief review of the April 16 meeting, followed by a proposed change in the IRP process presented in April. The intent of the change was to eliminate some of the process steps for the sake of reducing workload because of a smaller than planned IRP staff. Next was an explanation of how future resource needs are targeted using a combination of winter risk analysis and the requirements to meet Initiative 937, the Energy Independence Act. This was followed by a discussion of key factors in the plan, including future availability of capacity, wind generation, renewable portfolio standards, transmission constraints, renewable energy credits (RECs), an emissions tax on CO$_2$, and potential new resource portfolio design elements.

October 29, 2009. This meeting discussed key issues in the IRP; the amount of power and conservation customers are forecasted to require for maintaining a high degree of reliability (resource adequacy); and draft resource portfolios to meet that need. The first issue discussed was Initiative 937. City Light has sufficient renewables to meet the target through 2015, but lacks about 40 average megawatts to meet the 2016 target. Absent the I-937 target, City Light is unlikely to acquire new firm resources. The second issue was the impact of shale gas production on power resource economics and resource choices. New production from shale is increasing the supply of natural gas and driving down prices. The third issue was that the acquisition of conservation is constrained by budget, so that lower amounts are expected for 2011-2012. The resource adequacy discussion identified that City Light faces seasonal risk from very low hydro years combined with cold weather fronts, with the difference between resource adequacy and low-water generation growing from 75 average megawatts in the winter of 2011 to 430 average megawatts of energy by the winter of 2029. The resource portfolios to be tested in the plan were constructed with that in mind. Nine resource portfolios were presented for purposes of testing a variety of resource strategies. Based upon comments, the portfolios contained three different levels of conservation and various combinations of RECs and resources.

February 25, 2010. The meeting began with further discussion of the I-937, natural gas, and conservation issues first considered in the October 29 meeting. The results of the first round of modeling the nine Round 1 resource portfolios were presented and discussed. The difference between the coefficient of variation and more rigorous risk analysis was explained. Based upon the results, it was agreed that most of the portfolios could be dropped from further consideration. Three portfolios were ultimately carried forward for further analysis. The additional analysis for the final three portfolios was described, involving testing them with scenarios and with stochastic risk analysis.

April 13, 2010. The April 13 meeting began with a review of portfolio performance on cost and risk, as measured by the net present value of costs and the coefficient of variation. Next was a discussion of how scenarios can be used to test potential resource portfolios. The results of eight scenarios were presented, showing them as the difference from the base case. The high conservation portfolio outperformed the other portfolios in the majority of scenarios. Analysis of the range of outcomes for each scenario was presented, showing which scenario factors had the largest impact on City Light net costs. Demand had the largest impact, followed by natural gas prices, carbon dioxide emissions (assuming a mitigation cost for CO$_2$ emissions), and renewable energy credits had the least impact. Lastly, a discussion of other research in-progress occurred, focusing on the new Bloom Box fuel cell, electric vehicles, and climate change.

May 27, 2010. The meeting began with a retrospective of the IRP process to-date, including the key messages arising from the IRP analyses. The first decade of the plan is expected to be driven by conservation acquisition and meeting I-937 requirements. The second decade is expected to be driven by acquisition of new renewable resources, primarily to meet load growth. The scenarios were reviewed, followed by special research projects. An overview of the results of an analysis of climate change was presented, followed by presentations on electric vehicles and fuel cells.
Public Meetings

Three public meetings were held. The April 1 meeting was in the Bertha Knight Landes Room in City Hall. The April 6 meeting was in North Seattle at the Loyal Heights Community Center, and the April 15 meeting was in West Seattle at the Southwest Community Center. The meetings were advertised in the newspaper and in emails to community groups. One meeting used a telephone notification service, targeted by zip code. In total, about 50 people attended the meetings, with most attending either the City Hall or the North Seattle meeting. Below is a brief synopsis of the IRP public meetings. More detailed information is available in the presentation materials, online at http://www.seattle.gov/light/news/issues/irp/.

The meetings began with an overview of the agenda and a discussion of why City Light customers might care about an IRP. This was followed by a description of what an IRP is and key objectives for the IRP. It was explained that although City Light has sufficient firm resources on an annual average basis, it faces risk from the combination of low hydro generation caused by little precipitation together with high winter demand caused by severe cold fronts. This risk is managed by having sufficient resources in reserve for the winter months. In addition, City Light must prepare to meet the requirements of Initiative 937. The nine portfolios and the modeling of the portfolios were explained, along with the selection of the top three performing portfolios. Participants were asked to vote on three separate issues: 1) Their preference for new resource types in the IRP; 2) Their preference for other resource types not in the IRP; and 3) Whether City Light should emphasize renewable energy credits or new renewable resources for compliance with I-937.

In general, conservation, hydro efficiencies, wind, and utility-scale solar were favored by public meeting attendees. They also preferred resources over RECs.

The detailed voting results are represented in the following charts.
RECs, Resources, or Both?

- Both: 29%
- Resources: 57%
- RECs: 14%

Favored Candidate Portfolio of the Top Three

- High Conservation: 70%
- Lo-RECs: 25%
- Hi-RECs: 5%

Questions and Comments

Below is a summary of the questions and comments from emails, phone calls, and IRP public meetings:

Public Meeting Questions and Comments:

- Strong preference for conservation as a resource.
- Solar photovoltaic in community - why isn’t it in the plan?
- City Light should fund solar photovoltaic at Gasworks Park as requested.
- Distributed generation in the community is desirable.
- Given uncertainty, City Light should use both RECs and resources for I-937.
- Concern about injecting chemicals into shale for natural gas recovery.
- What kind of emissions control is there for wood biomass plants?
- City Light should get RECs and resources sooner, when they are cheaper.
- Why not tidal and wave energy?
- Why is City Light concerned with natural gas prices?
- Seasonal peak pricing should be considered to lower the amount of resources needed.
Email Address for IRP:

• Form a natural gas utility and use proceeds to fund solar and cogeneration projects.
• Solar hot water heating, wind energy, efficient windows, and cogeneration should be supported.
• Own more resources, rely less on the market.
• Small renewables, demand response, load control should be promoted.
• Don’t rely on contracts and market purchases.
• Plan for long-term and plan for the worst outcomes.
• Increase hydroelectric energy - it’s green.
• Small and large hydro both should be developed.
• Is it realistic to not include nuclear power in the resource portfolios?

Stakeholder General Comments:

• New BPA contract allows pre-scheduling water in Columbia reservoirs to meet peak loads. This should help to avoid acquisition of resources.
• Conservation is limited by budget and staff, not by cost-effectiveness.
• Concern over perception of reduction in conservation efforts through time.
• Why isn’t there more wind [in the portfolios]?
• Preference for “High Conservation” portfolio.

Other Comments:

• It is unclear what the 95% risk metric means.
• Other options than resources are available, like selling Q2 energy and buying Q4 energy.
• A “resource-heavy” plan takes market risk when the surplus is sold into wholesale market.
• Devise a conservation plan to meet all load growth.
• Concern about reliability of long-term fuel supply for biomass plants.
• REC contracts should be to deliver as scheduled – or pay for the replacement.
• Development risk should be considered in the analysis.

Conclusion

City Light received public input on the 2010 IRP from multiple sources including: three public meetings; a dedicated email address to receive public comment; an IRP website; six stakeholder meetings; letters from interested individuals and groups; phone calls; and the City Council Energy, Technology, and Civil Rights Committee during briefings.

City Light did not recommend a resource portfolio until May of 2010. Options remained open through most of the integrated resource planning process, allowing public input to continue to have value in shaping analysis and recommendations. The final public involvement opportunities were at the City Council’s Energy and Technology Committee meeting on August 4, 2010, and the opportunity for IRP Stakeholders to review and comment on the draft IRP document.