WASHINGTON CASE STUDY:
Utility Code Group Experience Helps Inform Other States

In 1993, Washington created a Utility Code Group (UCG) to enforce and increase compliance with a new statewide commercial building energy code that was a dramatic change from the state's historical codes up to that point. The UCG was successful at creating a forum for utilities to collaborate on supporting building energy code activities, which included a training initiative and a Special Plans Examiner and Inspector (SPE/I) program. The training program, which was designed by a broad base of stakeholders, was able to reach diverse audiences and improve builder and designer attitude regarding the new code. The administration of the Special Plans Examiner and Inspector program was later passed on to the Northwest Energy Efficiency Council (NEEC). Today, NEEC provides training and technical support for the commercial portions of the Washington State Energy Code, with funding from the Northwest Energy Efficiency Alliance (NEEA). NEEA also funds code development and training activities and conducts compliance studies throughout the region, using ratepayer funding. One major success of the UCG was a large increase in compliance resulting from the Special Plans Examiner and Inspector program; jurisdictions that participated had a compliance rate of 83%, compared to a 60% statewide compliance rate.[1] This program is informing State Energy Offices in other states, such as Minnesota, as they design approaches to improve code compliance.

Program Details

Scope and Activities

The Washington UCG was created as a non-profit organization in December 1993 to ensure strong rates of enforcement and compliance with a new commercial building energy code taking effect on April 1, 1994.[2] The major public and private utilities in Washington funded the UCG with ratepayer funds and each participating utility received one seat on the Board of Directors, with Bonneville Power Authority (BPA) representing many of the small public utilities.

The UCG's main activities included:

1. Training Program

The UCG developed training courses for building contractors and other industry groups and, based on feedback from training surveys, designed a new series of modules, with a track for designers and a track for contractors.[3] A group of trainers—who had expertise in one or more course topics — and three circuit riders[4] conducted the UCG-led trainings. From April 1994 through August 1996 there were over 7,500 participants in training courses and 910 participants in brown bag trainings at design and contracting firms.[5] Over 2,700 building officials, architects, engineers, and contractors utilized a free informational hotline organized by the Washington State Energy Office.[6]

2. Special Plans Examiner and Inspector Program

The UCG funded a third-party compliance verification program, known as the Special Plans Examiner and Inspector program, to increase building energy code compliance and give local jurisdictions flexibility in

1 David Baylon, Aaron Houseknecht, Jonathan Heller, and Les Tumidaj, "Compliance with the 1994 Washington State Nonresidential Energy Code (NREC)," Ecotope, Jun. 1997, 84-85.

2 The commercial code was also referred to as the nonresidential energy code (NREC).

3 For a list of training courses, see: Rick Kunkle, "The Washington State Energy Code: Energy Code Privatization – The Utility Code Group Story," Washington State University Extension Energy Program, Jan. 1997.

4 The circuit riders were contractors who led training courses and brown bag sessions in a specific region in the state.

5 Kunkle, 1997.

6 For a full list of technical assistance resources, see Kunkle, 1997.

enforcing the code. In jurisdictions that voluntarily participated in the program, building applicants hired a certified contractor to perform a building plan check and/or site inspection and were reimbursed by their utility.[7] One of the key advantages to this approach is that it increased building energy code compliance while not burdening local code officials, who had resisted the new energy code because they viewed it as a distraction from their main health and safety responsibilities. By early 1997, roughly half of all jurisdictions in Washington used the Special Plans Examiner and Inspector program. The UCG spent over $200,000 per year on the program.[8] (See Table 1 for a summary of key program expenses.)

Program Cost

Total Program Budget: $5 million over 3.5 years[9]

Funding Sources: 98% Ratepayer funds, 2% Other[10]

Table 1: Expenses of Main UCG Activity Areas[11]

Main UCG Activity Areas	Percentage of Total Budget
Training	60%
Special Plans Examiner and Inspector Program	15%
Quality Assurance/Evaluation	10%

Results

The UCG commissioned a compliance study on commercial buildings permitted in 1995 that showed an overall compliance rate of approximately 60%, which, while not as high as desired, was a marked increase over the 50% compliance rate found in a study on new commercial buildings in 1990.[12] Additionally, buildings that were approved by a Special Plans Examiner/Inspector showed a compliance rate of 83%. The training program had an impact on the attitude among building officials and designers, who took the commercial code much more seriously than the previous code. However, the Special Plans Examiner and Inspector program was the most "significant factor in achieving higher compliance."[13]

Following the UCG

The utilities stopped funding the UCG, as planned, in March 1997. The UCG identified NEEC as its successor organization, and NEEC still organizes training for the commercial building energy code. NEEA currently organizes code compliance studies and promotes stronger building energy codes in the region, with funding coming from ratepayers. However, the Special Plans Examiner and Inspector program was largely dormant by 2002, as funding was no longer available and the commercial code had evolved since 1994. While there recently has been interest in reviving the program due to increasing complexity in building energy codes, code officials indicate that they do not see a need for a Special Plans Examiner and Inspector program, and there are currently no plans to reinstate it.[14] Washington State's experience with this program provides useful reference for other states who may glean lessons and strategies to improve code compliance in their own jurisdictions.

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7 The Washington Association of Building Officials (WABO) administered the program. Building departments could contact WABO to receive a list of certified individuals. By June 1996, there were 150 examiners and 140 inspectors (Kunkle, 1997).

8 Northwest Energy Efficiency Council (NEEC), "Special Plans Examiner/Inspector System in Washington State," Accessed 29 Mar. 2012, https://conduitnw.org/Pages/File.aspx?RID=590.

9 Kunkle, 1997.

10 Other sources of revenue included fees for service and U.S. Department of Energy grants.

11 Percentages are based on information in the Kunkle report and the NEEC report on the SPE/I program (see earlier footnotes) and do not add up to 100.

12 Baylon, et al., 1997. In both studies, a building was deemed non-compliant if one component failed inspection. In 1995, compliance with each component of the code increased compared to 1990.

13 Baylon, et al., 1997.

14 Todd Currier, Washington State University Extension Energy Program, Interview by author, 15 Mar. 2012.