# Joint Select Task Force on Nuclear Energy Draft **December 3, 2014**

# **Background**

According to the federal Energy Information Administration, there are currently 65 commercially operating nuclear power plants with 104 nuclear reactors in 31 states around the country. These plants generate about 19 percent of U.S. electricity each year.

The Columbia Generating Station (CGS) near Richland, Washington is the Pacific Northwest's only commercially operating nuclear power plant. CGS is operated by Energy Northwest, a notfor-profit joint operating agency. The entire output of CGS is marketed by the Bonneville Power Administration. According to the most recent state fuel mix report, CGS supplied about 4.7 percent of the electricity used by retail customers in the state in 2012. CGS's federal operating license is set to expire in December 2043.

In 2013, the legislature appropriated \$500,000 in the capital budget to study the manufacturing of small modular nuclear reactors (SMRs) in the Tri-Cities. During the 2014 legislative session, the Senate Energy, Environment & Telecommunications committee heard a bill proposing the creation of a legislative task force to study nuclear energy in the region. While the bill did not pass, its substantive provisions were added to the supplemental operating budget.<sup>3</sup>

Under the budget provisions, an eight-member legislative taskforce must study the generation of nuclear energy in the region. It must hold no more than four meetings, with two of those meetings in Richland, Washington. Any findings and recommendations are due December 1, 2014.

Appointments to the task force were completed in May 2014, and the first meeting of the task force was on July 9, 2014, in Olympia, Washington. The second meeting of the task force was on September 25, 2014, in Pasco, Washington. The task force toured the NuScale Power facilities in Corvallis, Oregon on November 7, 2014. The final meeting of the task force will be held on December 3, 2014, in Olympia, Washington.

# **Task Force Members**

Senator Tim Sheldon, Chair Representative Jake Fey, Vice Chair Senator Sharon Brown Representative Shelly Short

Representative Norma Smith Senator Marko Liias Representative Sharon Wylie Senator John McCoy

Representative Richard Debolt (Alternate) Senator Doug Ericksen (Alternate)

<sup>&</sup>lt;sup>1</sup> ESSB 5035 (2013), section 1077(7) (TRIDEC Development of Small Modular Reactor Proposal).

<sup>&</sup>lt;sup>2</sup> SSB 5991 (2014).

<sup>&</sup>lt;sup>3</sup> ESSB 6002 (2014), sections 101 and 102; Appendix A.

# Senate Task Force Staff

# **House Task Force Staff**

William Bridges, Counsel Lindsey Lasher, Committee Assistant Nikkole Hughes, Analyst Rebecca Lewis, Legislative Assistant

# **Meeting & Tour Schedule**

First Meeting

July 9, 2014

Olympia, WA

## Agenda

- Christine Todd Whitman, Co-Chair, Clean and Safe Energy (CASEnergy) Coalition, and former U.S. Environmental Protection Agency administrator and New Jersey governor
- Election of officers
- Overview of proviso and task force responsibilities
- Member discussion

## **Brief Summary**

- Task force elected Sen. Sheldon as chair and Rep. Fey as vice chair.
- Christine Todd Whitman discussed the importance of nuclear energy as part of a diverse energy portfolio and job opportunities in the nuclear industry.
- Chair invited Jim Gaston, General Manager, Energy Services and Development, Energy Northwest, to give a brief introduction of Energy Northwest.
- Task force members discussed the possibility of a tour of NuScale Power in Corvallis, Oregon.

#### **Distributed Materials and Meeting Minutes:**

http://www.leg.wa.gov/JointCommittees/NEJSTF/Pages/Meetings.aspx

#### TVW:

http://www.tvw.org/index.php?option=com\_tvwplayer&eventID=2014070031

## Second Meeting

September 25, 2014 Pasco, WA

### Agenda

- U. S. Department of Energy Program for Small Modular Reactor Licensing Support
  - Ray Furstenau, Office of Nuclear Energy, U.S. Dept. of Energy
- Nuclear Energy Industry Today and Projected for the Future
  - Paul Genoa, Dir. of Policy Development, Nuclear Energy Institute
- Panel: Unsolved Problems with Nuclear Power
  - Gerry Pollet, Ex. Dir., Heart of America Northwest
  - Charles K. Johnson, Dir. of the Joint Task on Nuclear Power of Oregon and Washington Physicians for Social Responsibility
- Challenges & Opportunities for Nuclear Generation in the Region

- Brent Ridge, V.P., of Corporate Services and CFO, Energy Northwest
- Overview of New Nuclear Technologies
  - Dale Atkinson, Chief Operating Officer and Chief Nuclear Officer, NuScale Power
- Estimate of Cost of Power from New Nuclear Resources (SMRs and Others)
  - Dale Atkinson, Chief Operating Officer and Chief Nuclear Officer, NuScale Power
- Economic Development Opportunities for the State of Washington: Assembly of Nuclear Components in the TriCities
  - Gary Petersen, V.P. Tri-City Development Council (TRIDEC)
  - Mike Lawrence, Chairman, TRIDEC's Mid-Columbia Energy Initiative
- Comments from Local Community Leaders
  - Dawn Alford, Dir., Nuclear Technology Program, Columbia Basin College
  - Keith Moon-Young, Chancellor, Washington State University
  - Ed Brost, General Manager, Franklin PUD
  - B. C. Smith, Business Agent, Washington Building Trades
  - Wanda Munn, American Nuclear Society
  - Carl Holder, Chair, Eastern Washington Section, American Nuclear Society
- Task Force Business
  - Questions from Task Force Members
  - Next steps
  - Next Meeting
  - Corvallis NuScale Tour
- Public Hearing

#### **Brief Summary**

- Ray Furstenau, U.S. Dept. of Energy, said the federal government is supporting SMR technology because of enhanced safety features, reduced capital costs, the ability to meet electric demand growth incrementally, potential non-electric uses such as desalination, and potential international markets.
- Paul Genoa, Nuclear Energy Institute, reviewed domestic and global nuclear developments, the impacts of nuclear power plant retirements, and nuclear energy's role in a carbon constrained economy.
- Gerry Pollet, Heart of America Northwest, testified that CGS is not cost effective for NW ratepayers and that serious waste and security issues surround nuclear power.
- Charles Johnson, Oregon and Washington Physicians for Social Responsibility, challenged the safety and economics of SMRs.
- Brent Ridge, Energy Northwest, reviewed the history and future of Energy Northwest and stated that nuclear energy is clean and economical.
- Dale Atkinson, NuScale Power, gave an overview of nuclear power and explained the workings and future of NuScale Power's SMR.
- Gary Petersen and Mike Lawrence, TRIDEC, reviewed the feasibility of siting an SMR at Hanford and pointed to the economic opportunities assembling SMRs could bring to the Tricities.
- Local community leaders (i.e. Dawn Alford, Columbia Basin College; Keith Moon-Young, Washington State University; Ed Brost, Franklin PUD; B. C. Smith, Washington Building

Trades; Wanda Munn, American Nuclear Society; and Carl Holder, American Nuclear Society) testified in support of nuclear power, the siting of an SMR at Hanford, and assembling of SMRs in the Tri-cities.

• Seventeen persons supported nuclear power and were in favor of assembling SMRs in the Tri-cities.

## **Distributed Materials and Meeting Minutes:**

http://www.leg.wa.gov/JointCommittees/NEJSTF/Pages/Meetings.aspx

#### TVW:

http://www.tvw.org/index.php?option=com\_tvwplayer&eventID=2014090070

# Tour of NuScale Power November 7, 2014

Corvallis, OR

## Agenda

- Welcome, Introductions, Agenda Review
  - Dale Atkinson, Chief Operating Officer and Chief Nuclear Officer, NuScale Power
- NuScale History, Technology, Testing Programs
  - Dr. Jose Reyes, Chief Technology Officer, NuScale Power
- Program WIN (Western Initiative for Nuclear) Plan, Schedule Overview
  - Chris Colbert, Chief Strategy Officer, NuScale Power
- Potential Role of NuScale in Washington State
  - Dale Atkinson, Chief Operating Officer and Chief Nuclear Officer, NuScale Power
- Control Room Simulator Tour
- NIST (NuScale Integral System Test Facility) Tour
- Summary
  - Dale Atkinson, Chief Operating Officer and Chief Nuclear Officer, NuScale Power

### **Distributed Materials:**

http://www.leg.wa.gov/JointCommittees/NEJSTF/Pages/Meetings.aspx

## Third Meeting

**December 3, 2014** 

Olympia, WA

#### Agenda

- Review of task force activities
- Discussion of task force recommendations

#### Appendix A

### ESSB 6002 (2014)

**Sec. 101.** 2013 2nd sp.s. c 4 s 101 (uncodified) is amended to read as follows:

#### FOR THE HOUSE OF REPRESENTATIVES

. . .

The appropriations in this section are subject to the following conditions and limitations: A joint select task force on nuclear energy is created to study the generation of energy in the region through the use of nuclear power. The task force must report any findings and recommendations to the legislature by December 1, 2014.

- (1) In its deliberations, the task force must consider the greatest amount of environmental benefit for each dollar spent based on the life-cycle cost of any nuclear power technology. Life-cycle costs must include the storage and disposal of any nuclear wastes.
- (2) The task force must consist of eight members that serve on the legislative standing committees with primary jurisdiction over energy issues. The president of the senate shall appoint two members from the majority caucus, two members from the minority caucus, and an alternate. The speaker of the house of representatives shall appoint two members from each caucus and an alternate.
- (3) The members of the task force shall select from among their members a chair and other officers as the task force deems appropriate.
- (4) The task force must hold no more than four meetings, with two of those meetings in Richland, Washington.
- (5) The task force must be staffed by senate committee services and the office of program research of the house of representatives.
  - (6) The task force terminates December 15, 2014.

**Sec. 102.** 2013 2nd sp.s. c 4 s 102 (uncodified) is amended to read as follows:

#### FOR THE SENATE

. . .

The appropriations in this section are subject to the following conditions and limitations: A joint select task force on nuclear energy is created to study the generation of energy in the region through the use of nuclear power. The task force must report any findings and recommendations to the legislature by December 1, 2014.

- (1) In its deliberations, the task force must consider the greatest amount of environmental benefit for each dollar spent based on the life-cycle cost of any nuclear power technology. Life-cycle costs must include the storage and disposal of any nuclear wastes.
- (2) The task force must consist of eight members that serve on the legislative standing committees with primary jurisdiction over energy issues. The president of the senate shall appoint two members from the majority caucus, two members from the minority caucus, and an alternate. The speaker of the house of representatives shall appoint two members from each caucus and an alternate.
- (3) The members of the task force shall select from among their members a chair and other officers as the task force deems appropriate.
- (4) The task force must hold no more than four meetings, with two of those meetings in Richland, Washington.
- (5) The task force must be staffed by senate committee services and the office of program research of the house of representatives.
  - (6) The task force terminates December 15, 2014.