Beyond Nuclear and anti-nuclear groups petition the NRC to take emergency enforcement action at U.S. reactors with at-risk components from AREVA Le Creusot Forge

TAKOMA PARK, MD, January 24, 2017 — Beyond Nuclear, a national anti-nuclear advocacy group, along with co-petitioners from around the United States, have requested that the U.S. Nuclear Regulatory Commission (NRC) take emergency enforcement action at U.S nuclear power plants that AREVA notified may be operating with potentially defective large components. The parts were manufactured and imported from France’s Le Creusot Forge and are at the center of an international nuclear safety controversy.

The 17 affected units at U.S. nuclear power plant sites were confirmed by AREVA to the NRC in an attachment to a December 15, 2016 letter.

The at-risk reactors and components are:

**Reactor Pressure Vessels:** Prairie Island 1 & 2 (MN); **Replacement Reactor Pressure Vessel Heads:** Arkansas Nuclear One 2 (AR), Beaver Valley 1 (PA), North Anna 1 & 2 (VA), and Surry 1 (VA); **Steam Generators:** Beaver Valley 1 (PA), Comanche Peak 1 (TX), V.C. Summer (SC), Farley 1 & 2 (AL), South Texas 1 & 2 (TX), Sequoyah 1 (TN) and Watts Bar 1 (TN), and; **Reactor Steam Pressurizers:** Millstone 2 (CT) and Saint Lucie 1 (FL).

The groups’ petition to the agency requests that power operations at the 17 affected U.S. reactors be suspended pending thorough inspection and material testing of the at-risk components. The request follows on the public release of a December 7, 2016 Areva communication to the NRC and its listed U.S. customers notifying them of potential defective components and non-compliance from the Le Creusot Forge.

The “Reporting of Defects and Noncompliance” (10 CFR 21) is a NRC requirement when a nuclear supplier “obtains information reasonably indicating” that they may have supplied a defective or non-compliant component to a US nuclear facility “relating to substantial safety hazards.” AREVA is preparing a follow-up evaluation for its customers by June 30, 2017. Meanwhile, the AREVA-Le Creusot Forge remains the focus of international reactor inspections and material testing of at-risk components.
French legal authorities are investigating the falsification of quality assurance documents by the manufacturer.

“The NRC cannot reasonably rely upon paper reviews of potentially defective reactor components here in the U.S. to assure our public safety,” said Paul Gunter, Director of the Reactor Oversight Project at Beyond Nuclear. “We are asking the NRC to initiate the same level of scrutiny with enhanced component inspections and materials testing as is ongoing at European reactors with these at-risk components,” said Gunter.

Beyond Nuclear and the co-petitioners from around the U.S. have collectively filed an emergency enforcement petition under Chapter 10 of the Code of Federal Regulation Part 2.206 (10 CFR 2.206). The petition process is the agency’s only venue for the public to initiate emergency enforcement action requesting that the Commission initiate proceedings “to modify, suspend or revoke a license.”

The potentially defective parts were manufactured at the Areva-Le Creusot Forge in France which forges large ingots into large components like the reactor pressure vessel. First identified in France’s Flamanville 3 reactor under construction, the defect, “carbon anomaly” or “carbon macrosegregation,” introduces an excessive amount of carbon across a large zone of the component that can run throughout its thickness.

The defect can weaken the component’s “fracture toughness” making it susceptible to “fast fracture” under operational pressure and accident conditions. The Petitioners seek the examinations and material testing to assure that the Le Creusot components in U.S. reactors are in compliance with their design-basis specifications.

The 2.206 emergency enforcement petition filed by Beyond Nuclear seeks emergency shutdowns pending the enhanced inspections of at-risk components along with material testing of surplus material taken from the component.

The petitioners also provide that should the NRC deny their request for the suspension of the operating license pending inspection and testing that the agency alternatively modify the license to require the exams and testing at the first scheduled outage.

The petitioners additionally request that the NRC issue a letter to every U.S. reactor operator to answer under oath how they are reliably monitoring their supply chain to guard against similarly defective components.

“Where the NRC has all too often required ‘absolute proof’ of a safety problem before asking industry to take measures to assure public safety, the agency should not leave room for even the slightest doubt at these seventeen reactors,” Gunter concluded.

The emergency enforcement petition provides the list of co-petitioners and their contact information.

###