

**From:** [Peralta, Rene \(Fed\)](#)  
**To:** [Ost, Laura M. \(Fed\)](#)  
**Cc:** [Peralta, Rene C. \(Fed\)](#)  
**Subject:** Re: question about NIST randomness beacon  
**Date:** Monday, April 24, 2017 8:21:59 AM  
**Attachments:** [image001.png](#)  
[image002.png](#)  
[image003.png](#)  
[image004.png](#)

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Hi Laura,

The NIST Beacon combines two commercial hardware devices. The devices get randomness from thermal noise. There are quantum and classical models of this noise, and some vendors advertise similar sources as "quantum". Our project views these mostly as classical, though. In the next few years, we plan to add a truly quantum source to the Beacon.

Regards, Rene.

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**From:** Ost, Laura M. (Fed)  
**Sent:** Friday, April 21, 2017 11:14 AM  
**To:** Peralta, Rene (Fed)  
**Subject:** question about NIST randomness beacon

Rene:

Do you know whether the NIST randomness beacon uses strictly classical sources, or anything quantum? Josh Bienfang told me it uses commercial sources but he doesn't know what's going on inside them. Scott Glancy suggested you might know.

Thanks,

Laura

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