

## CHAIRMAN Resource

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**From:** Tom Gurdziel <tgurdziel@twcny.rr.com>  
**Sent:** Thursday, May 28, 2015 9:58 PM  
**To:** CHAIRMAN Resource  
**Cc:** Screnci, Diane; T Holden; Tammy.Mitchell@dps.ny.gov; Bridget Frymire  
**Subject:** Comments on Big Transformers

Good morning,

It has become the practice to provide a collection basin below big transformers to collect oil that may spill. Then it is filled with coarse gravel to provide operator/electrician access. Problem one may be that the volume of the gravel reduces the available collection volume. (I don't know if the gravel is taken into account.) Then rain falls and collects in this basin. So you need to pump it out (before you need the capacity), or, if you have an open drain valve to allow the rain water to drain, you need to shut the valve before you need the basin.

But, suppose that you do have an empty collection basin with no open drain valve and you have a transformer fire. Noting that the transformer fluid is apparently lighter than water, the water supplied for firefighting will lift up the initially collected transformer oil and it will spill out into the environment. This should be no surprise.

It would then appear that the current method of sizing collection basins for main transformers may need to be identified as insufficient.

A second item is that a big transformer may have an overpressure relieving device on it. If the most recent failed Indian Point transformer had one of adequate size, I would expect that the transformer shell would still be intact, (except for fire-caused damage). However, when we had our one-phase main transformer failure at Nine Mile Point, Unit 2, the shell had burst. I was unable to get an answer to my question: was the overpressure relief device of adequate size?

I would think that both adequate basin size and overpressure relief capacity should at least be mentioned in the Entergy/Indian Point report planned for release the end of next month.

Thank you,

Tom Gurdziel