From: Michael DeChiara
To: Reilly, Timothy J (DPU)
Cc: Greene, Andrew (DPU); Collins, Rick (ENE); SitingBoard Filing (DPU); Mengesha, Yonathan (DPU)
Subject: Re: following up on Cumulative Impact SGAs
Date: Thursday, May 8, 2025 12:00:41 PM
Attachments: image001.png

Thank you Tim. More comprehensive comments will be forthcoming.

With appreciation,

Michael

[redacted]

From: Michael DeChiara <mdechiara@gmail.com>
Sent: Wednesday, May 7, 2025 3:57 PM
To: Reilly, Timothy J (DPU) <Timothy.J.Reilly@mass.gov>
Cc: Greene, Andrew (DPU) <andrew.greene@mass.gov>; Collins, Rick (ENE) <Rick.Collins@mass.gov>
Subject: following up on Cumulative Impact SGAs

Tim,

It was good to meet you at the Holyoke session on Wed. I wanted to follow-up on my point about your assessment of SGAs

As I mentioned, I think these assumptions are premised on a static, best case or "normal" scenario. On the contrary, I think EFSB and DOER should be thinking about these in a protective manner - assuming worst case scenarios. This approach would enable EFSB and DOER to fulfill their public role of considering a community's public health, safety and welfare.

BESS

The most egregious of these assumptions is for BESS. As I mentioned, in the case of a fire, which we know is a known risk for lithium-ion batteries, the nationally recognized best practice is to let them burn themselves out, applying lots of water to prevent thermal runaway. It is accepted, including by the National Fire Protection Association, that these cannot be extinguished by water.

Scenario 1: Water is applied. If water is applied consistently over days, the runoff will be toxic. The fumes released will be toxic. This will continue for days. Local water systems will likely be affected (need for good containment). In the case of Moss Point in CA, the emergency response was evacuation of closest residents and staying indoors for others. In NYS state in 2024, those ESS fires burned for a few days as well - fortunately these were sited in industrial parks so only the toxic plumes were an issue. For context, it takes on average 6000 gallons of water to put out a Tesla car fire.

Scenario 2: No water. In towns like Shutesbury and many other Western and Central Mass municipalities, there is no central water - we are on 100% drinking water wells. As I mentioned, in cases of any fire in town, the pumper trucks go to designated ponds to fill up. There is literally not enough water to apply to an ESS fire in these towns. If an ESS is placed in a forest, a lithium-ion fire will definitely result in a forest fire, likely property damage, and a toxic plume for as many days as the fire burns.

Needless to say, the radius affected in either of these scenarios is well beyond 1/2 to 1 mile.

SOLAR

While industrial solar installations do not pose the level of risks associated with ESS, they also can have impacts in terms of erosion, change in water flow or flooding. All of these can extend beyond the 1/4-1/2 radius estimated below. In Shutesbury, we have one solar installation so far and underground waterflow was definitely impacted, increasing flooding to residences downhill. Another proposed 5 sites are planned for slopes up to 30+ degrees, meaning erosion, sedimentation and flooding are likely. These impacts will be beyond the 1/2 mile radius

REQUEST

I have a two-part request if you update these estimates:

1. Do some ground-truthing with communities to understand the practical risks and impacts

2. Plan for the worst, anything less will mean leaving communities and their residents vulnerable because the planning will be inadequate.

Thanks

Michael

Proposed SGAs for Energy Facilities CIA

Energy Technology	Proposed SGA Major Site Work[1]	Proposed SGA: Minor Site Work[2]	Rationale
Transmission lines	1 Mile (Radius)	½ Mile (Radius)	Construction and visual impacts attenuate beyond this radius
Battery Energy Storage System (BESS)	1 Mile (Radius)	½ Mile (Radius)	BESS-related fire evacuation area considerations; Construction and visual impacts attenuate beyond this radius
Substation	1 Mile (Radius)	½ Mile (Radius)	Construction and visual impacts attenuate beyond this radius
Solar Farm	½ Mile (Radius)	¼ Mile (Radius)	Construction and visual impacts attenuate beyond this radius
Wind Farm	2 Mile (Radius)	1 Mile (Radius)	Construction, operations, and visual impacts attenuate beyond this radius
Anaerobic Digester	2 Mile (Radius)	1 Mile (Radius)	Construction, operations (emissions), and visual impacts attenuate after this radius
Fossil Fuel	5 Mile	2 ½ Mile (Radius)	Construction, operations (emissions), and visual impacts attenuate beyond this radius.
Networked (Community) Geothermal	½ Mile (Radius)	¼ Mile (Radius)	Construction and visual impacts attenuate beyond this radius
Other Energy Technology	TBD	TBD	SGA to be proposed (TBD) by Project Proponent based on specific energy technology proposed.

[1] Proposed SGA Major Site Work: New Construction and Major Site/Equipment Upgrades

[2] Proposed SGA Minor Site Work: for lower impact projects, as permitted by the EFSB

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Preferred pronoun: he/him/his (why include this? -- about pronouns)

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