Q: Could piezoMEMS devices be made on SiC substrates?
A: Yes and there are examples in the literature.

Q: Would you consider reducing the cost of SiC, GaN or diamond substrates responsive to this BAA since the topic is substrate agnostic and accepting a wide range of conventional substrates?
A: The goals outlined in the topic are explicitly aimed at piezoelectric MEMS processes and relevant dielectric and piezoelectric material properties.

Q: Although the BAA calls out AlN and PZT piezoelectric materials as examples, are other piezoelectric materials such as SiC or quartz also of interest if they can be integrated with arbitrary large substrate as shown in Fig. 1 of the BAA? In other words, can the BAA be interpreted for looking for PDKs for integrating arbitrary piezoelectric resonators on arbitrary substrates?
A: 1) Other materials can be considered if they can meet the metrics outlined in the topic.
   2) The PDK is envisioned to be general and applicable to a wide variety of devices.

Q: For a DP2 proposal, in order to satisfy the Phase I metrics, does a process need experimental demonstration with 150 - 300 mm substrates, or can previous process development with smaller substrates be used for satisfying the Phase I metrics with the scale-up proposed for DP2?
A: For a DP2, the metrics outlined in Phase 1 including the substrate size should be demonstrated.

Q: Is it possible to list d33, d31, and e33,f metric values that could be used as a substitute in place of e31,f in the phase 1 and 2 metrics tables?
A: A value for d31 can be converted to an e31,f value. If providing this calculation, please provide what elastic compliance values are used for the calculation. Additional piezoelectric coefficients can be used.

Q: For the metric on number of substrates, does a seed layer on a substrate count as a separate substrate? For example, silicon-on-insulator-on-Si seems to be different from Si. Would, for example, Al on quartz also be different from quartz? Also, would AlGaN-on-Si be considered different than Si?
A: A seed layer for growth of the piezoelectric layer would not be considered a separate substrate.