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To: regulations.gov

Subject: My Second Public Comments on Advanced Computing

ID BIS-2022-0025; RIN 0694-AI94; FR October 13, 2022

On January 25, 2023, I submitted my First Public Comments identified as ID BIS-2022-0025-02, Current Tracking Number idb-vclp-uhss. Well in advance of January 25, I submitted to ISTAC, RPTAC, and BIS these identical comments in draft, with a request for comment that they might be counter-productive, in which event I would not submit them. Earlier on January 25, ISTAC gave me the opportunity to make a presentation on this subject. The ISTAC Chair asked me to comment on the relationship between 4A003b and 4A090. I responded that 4A090 was a subset of 4A003b and exporters were faced with having to determine which of two inconsistent export license thresholds to follow. The Chair then encouraged me to submit my comments to regulations.gov.

After the ISTAC January 25 meeting, an ISTAC member informed me as follows:

Thank you for sharing and submitting the comments, Bill.

* As discussed in ISTAC open session, I think BIS doesn’t see the 3A090/4A090 controls as a replacement for 4A003 controls, but in addition to them.
  + If 4A090 but **not** 4A003, then 4A090.
  + If **not** 4A090 but 4A003, then 4A003
  + If 4A090 **and also** 4A003, then 4A003.
* That said, I think your comment is very valuable for BIS assessment.
  + This intended hierarchy may not be clear in the rule, ECCN entries, elsewhere in the EAR, and/or the general awareness of exporters.
  + Even if BIS disagrees with your overall “repeal” suggestion, this detail can spur the needed clarifications.

With all due respect, BIS cannot clarify “If 4A090 but **not** 4A003, then 4A090” or If **not** 4A090 but 4A003, then 4A003,” because those situations do not exist.

4A090 does not exist at all, because zero in the third digit means based on Wassenaar, which is incorrect. More to the point, both 4A090 and 4A003b use the TOPS (Tera Operations Per Second) parameter; and the license requirement threshold of 4800 in 4A090 is a subset of “exceeding 29 Weighted TeraFlops” in 4A003b. There are only two other differences, neither of which provides a basis for determining that 4A090 controls are in addition to 4A003:

1. 4A090 includes parameters in addition to TOPS in 3A090a1, a2, a3, and a4; and
2. 4A090 omits the 4A003b W for Weighted.

Re (1), a 4A003b computer remains 4A003b even if it also contains all of the 3A090a parameters.

Re (2), the CCL states “For ‘vector processors,’ Wi = 0.9. For non-‘vector processors,’ Wi = 0.3.” In other words, Wi only reduces effective 4A003b license requirement threshold from 29 TOPS to either

0.9 x 29 TOPS or 0.3 x 29 TOPS. Wi is not a 4A003b parameter in addition to, or different from, TOPS.

The effective 4800 TOPS threshold for 4A090 license requirements is probably also reduced by an architectural adjustment factor, even though not mentioned in its definition. If it were mentioned, the Wi numerical factors might differ from those applicable to 4A003b. Therefore, W does affect slightly the numerical difference between 4A090 and 4A003.b effective TOPS license requirement thresholds.

But W provides no substance to support the assertions that there are computers “4A090 but **not** 4A003, then 4A090” or “If **not** 4A090 but 4A003, then 4A003.”