There were 11* new interpretations to 6A drafted in response to RFIs received between the previous report of June 12, 2018 and December 12, 2018.

*A total of 16 questions were answered, as 5 RFIs had two separate questions on the same subject.

All 11 interpretations were to the 20th edition.
Q: Our understanding is that clause 6.5.2.3 is applicable to corrosion-resistant weld overlay and this clause is not applicable to hard facing PQR (No need to prove the minimum mechanical property with PQR). Is this correct?

A: No. API 20th Edition, Section 6.5 applies to “Weld overlay for corrosion resistance and/or hard-facing and other material surface property controls”

Section 6.5.2.3 applies to weld overlay for corrosion resistance and for hard-facing.
Interpretation 2 - 6A e20, 10.1:

Q: If the bore of a weld-neck flange is reduced from the face to the weld preparation, is there a need to still use the $J_2$ minimum diameter when the maximum allowable bore is not used all the way through the flange?

A: Yes, Dimension $J_2$ applies at the length $J_3$. A 6BX weld-neck flange with an OD taper that exceeds that obtained with the $J_1$, $J_2$, and $J_3$ dimensions is outside the scope of Spec 6A.
Interpretation 3 - 6A e20, Table 5:

Q1 (of 2): Regarding the higher strength material designations for end connections in comparison with bodies, is the material designation for an integral flange the governing material, and therefore the whole valve will be of the higher material designation? (i.e. valve body will unavoidably be of the same material designation as of the integral end flanges)

A1: No, It is not unavoidable. For example, the body section can be lower in hardness/strength than the integral end connectors.
Q2: Does this difference between material designations for bodies and end connections permit a manufacturer to weld a pair of flanged end connections valve body of a lower material designation, as per footnote ‘a’ of Table 5?

A2: Yes. The material designation of 6A end connectors is established by API 6A, while the material designation of the body section is established by the manufacturer for his design.
Q: Is “Loose Flange” considered to be a subcategory of “Loose Connector?” (Or can it be considered as “other pressure containing parts”?)

A: Yes; a loose flange is a type of loose connector.

(Clarified in 21st edition)
Q1 (of 2) Is a 7500 psi (test) chart sufficient to meet Annex F design validation requirements for a Tubing Head Body with an 11" 5K lower flange and a 7-1/16" 10K upper flange?

A1: No. Per 10.6.3.8, “If casing-head spools or tubing-head spools are used as cross-over spools, they shall satisfy the requirements of 10.14” (cross-over connectors). For cross-over connectors, 7.4.9.3.3.b requires that the lower (5000-psi) flange be isolated and the upper (10-ksi) flange be tested at 15 ksi.
Q2: According to Table F.24, Tubing Head Bodies don't need design validation. Is this correct?

A2: No. Clauses F.2.8 & F.2.9 provide recommended validation test procedures for PR1 tubing head spools and PR2 tubing head spools, respectively. Table F.24 is only an informational summary.

(Clarified in 21st edition)
Interpretation 7 - 6A e20, 7.4.2.1.4:

Q: Is any dimensional inspection of API threads required \textit{in addition} to the gauged inspection for stand-off at hand-tight assembly by use of the gauges and gauging practices illustrated in Figures 10, 11 & 12?

A: No. The minimum requirement is specified in 7.4.2.1.4.b and illustrated in Figures 10, 11 and 12. Additional inspection methods may be used but are not required.
Q: Do you agree that unaffected base metal that has already been hardness tested and documented as meeting requirements does not need to be retested after welding if no PWHT or further thermal process is applied?

A: Yes; base material which has been hardness tested prior to welding, is unaffected by the welding, and has not been subjected to heat-treatment or machining afterward does not require additional hardness testing.
Q1 (of 2): 7.4.2.1.3 (PSL 1) states that loose connectors do not require hardness testing. 7.4.2.2.3 (PSL 2) states that hardness testing requirements for PSL 2 shall be identical to the requirements for PSL 1, except that all parts shall be tested.

In 7.4.2.2.3 (PSL 2) does "all parts shall be tested" refer only to the sampling requirements in 7.4.2.1.3 for applicable products?
Interpretation 9 - 6A e20, 7.4.2.2.3:

A1: No. Clause 7.4.2.1.3 specifies sampling for PSL 1, it does not define products or sampling applicable to hardness testing for other PSLs.

Q2: Is it meant to also include loose connectors for PSL2, as well?

A2: No. PSL 2 loose connectors shall be hardness tested.
Interpretation 10 - 6A e20, 7.4.3:

Q1 (of 2): Is it acceptable to carry out UT on bar stock (i.e. 6-meter lengths)?
A1: Yes, bar stock may be UT tested if the UT procedure conforms to all requirements of 7.4.3.2. Spec 6A does not specify a maximum length of bar stock for UT.

Q2: Must the bar be cut into individual pieces that the stems would then be machined out of?
Q2: No; see answer 1.
Q: If serialization was lost prior to valves leaving the manufacturers premises due to shot blasting prior to painting, could these components be re-serialized?

A: No, parts may not be re-serialized. However, if marking was removed but traceability is maintained, the marking may be reapplied in accordance with 7.4.2.2.5.
Interpretation 5 - 6A e20, 5.7.2.3:

A maximum Equivalent Round of 5" is required for PSL 3 parts. This may be interpreted that any size of solid bar can be represented by this QTC (e.g., 25“ dia) and any part can be cut from this (e.g., a crossover from a 24" OD flange to a much smaller union of OD 9"). If a material with low hardenability is used, a large amount of the part will be made of material with inferior properties and the physical part will not be represented by the calculations performed during the design phase, which is not acceptable, but does comply with the 5" QTC.
Interpretation 5 - 6A 20, 5.7.2.3:

Q1 (of 2): Is it acceptable to make the part as described above?

A1: API interpretations do not determine if a manufacturer’s specific production process is acceptable for the intended service. The QTC size specifications are minimum requirements and may be exceeded.

(Clarified in 21st edition)
Q2: Should the part be roughed to near net shape, then heat treated?

If it is expected that parts are roughed and heat treated, I would like to see a reference to API 6HT and clarity on when it should be used.

A2: API does not determine whether a production part should be rough machined prior to heat treatment or to what configuration. That is the responsibility of the manufacturer. *(Clarified in 21st edition)*
6A Interpretations

Any Questions?