API SPECIFICATION 6AV1
SPECIFICATION FOR VALIDATION OF WELLHEAD SURFACE SAFETY VALVES AND UNDERWATER SAFETY VALVES FOR OFFSHORE SERVICE

API-SC6 2018 Winter Conference
6AV1 3rd edition

- The TG was formed after 2017 Summer conference to review the 2nd edition.
- 3 meetings were held and to align with the requirements in API-6A 21st edition
- API-6A will continue setting the requirements for Safety Valve.

API-6A 21st edition (draft)
- Section 10.20 covered SSV, USV applications - now include BSDV.
- Validation requirements for Safety Valves are summarized in 6A Table 88. The PR2F is to designate the validation for PR2 level according to Annex F
- Class I is for application that has no sand. The TG agreed the Annex F 200 cycles at full differential pressure and extreme temperatures is more stringent than Annex I (and previous 6AV1) 500 cycles at 400 psi differential pressure

<table>
<thead>
<tr>
<th>Safety Valve Service Class</th>
<th>Performance Requirements</th>
<th>Testing Requirements</th>
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<td>Operating Cycles</td>
<td>Thermal Cycles</td>
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<td>I</td>
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<tr>
<td>III</td>
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\(^a\) Manufacturer may perform an API 6AV1 Class II test replacing the sand slurry with plain water as the test fluid.
The final draft was submitted to API. API sent out Ballot 4336 on Jan-18-2018 for voting and comment.

The introduction in 3rd edition lists the major changes of the document:

- Title of the specification was changed to reflect the content of the document.
- Rewording the scope to explain the intention of the tests for SSV USV and BSDV applications and clarify that the validation of the actuator is outside the scope of this document. (6A PR2F)
- The words “test valve” have replaced “SSV/USV valve” throughout the document to acknowledge the potential validation of boarding shut-down valves.
- For class III, the wording “substantive change to the valve bonnet assembly” in the previous edition was clarified to read “substantive change to the valve stem seal”.
- The test agency is now required to conform to ISO 17025.
- Annex A (API Monogram Program) was removed.