SDO View of MDEP CSWG

Kevin Ennis

Director, ASME Nuclear Codes and Standards

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Views from members of the SDO Convergence Board:

- JSME
- KEA / KEPIC
- AFCEN
- CSA
- ASME

JSME's Statements on MDEP Conference at 14-15, May 2014

JSME
Main Committee on Power Generating Facilities Code
MDEP TASK GROUP

JSME's Proposal about SDO's Statements (1)

- Necessity of Convergence of "Regulatory Requirements"
- SDOs provide Specification Codes and Std's to materialize the performance & safety requirements set by Regulatory Authorities, and voluntary Code Convergence activities could not exceed the differences of such Regulatory Requirements.
- Then, further promotion of Code Convergence activities needs convergence of performance & safety requirements of Regulatory Authorities.

JSME's Proposal about SDO's Statements (2)

- Cooperation with Regulatory Authorities and Other Stake Holders for B-DBE Field

- JSME believes that SDOs should provide Specification Codes even in B-DBE field, same as in the design base field, in order to materialize the new safety requirements established or to be established by Regulatory Authorities.
- Then, JSME is ready and wish to cooperate with Regulatory and other stake holders for development of new Codes and Std's for B-DBE field.

JSME's Proposal about SDO's Statements (3)

- Promotion of MRA (Mutual Recognition Arrangement) between SDO's Codes and Std's
- SDOs could promote MRA in specific area(s) included in the own Codes and Std's.
- However MRA of SDO's whole Codes and Std's could be done only by Regulatory Authorities who have the right to endorse them.
- Then SDOs request Regulatory Authorities to promote MRA of SDO's Codes and Std's with utilizing the achievements of MDEP CSWG.

JSME's Proposal about SDO's Statements (4)

- Promotion of International R&D Activities for Enhancement of Nuclear Safety

- In former days, R&Ds for enhancement of Nuclear Safety had been conducted by each countries or JV by few countries.
- However, R&Ds for enhancement of new Nuclear Safety including B-DBE need larger scale of cooperation involving many countries.
- Then, JSME proposes Regulatory Authorities of each countries to promote R&Ds for enhancement of new Nuclear Safety as real international projects, and JSME is ready to join and cooperate.

JSME's Proposal for SDO's Statements (5)

➢ Positive Employment of Advanced Technologies

- Now, by the rapid progresses of computer hardware and software, advanced analysis & evaluation technologies such as elastic-plastic analysis and strain based design are ready for practical use.
- Then, if accepted by Regulatory Authorities in close future, SDOs want to introduce such advanced analysis & evaluation technologies into SDO's nuclear Codes and Std's.
- Then SDOs request Regulatory Authorities to remove excessive conservatism in endorsement processes and promote employment of advanced & evaluation technologies into the nuclear component design.

KEA/KEPIC position for future role/activity of MDEP CSWG

- Since 2009, MDEP CSWG and SDO group have been cooperating to actively pursue the MDEP.
- As per the MDEP Code Comparison Report, divergences of 6 nations' nuclear codes in due to different culture and regulations of each nation.
- Therefore, CSWG that consist of each nation's regulatory side, is important strategy partner for the minimizing activity for code divergence of SDO group and public acceptability for code rule making & revision activities.
- Also, KEA/KEPIC hope that CSWG and SDO group is not a dominant-subordinate relationship but a relation of equality to make and continue safe nuclear usage.

Identified subjects of harmonization

afcen

- **Need for part procurement compatibility for 2 main applications**
  - **New builts**
  - **Replacement/repair of existing component: life extension and power upgrade**
- **Need of compatibility between codes, in all fields, some examples:**
  - **Generalities:,**
    - Quality management system :
      IAEA GS R 3, NQA 1, ISO 9001, NSQ100 ,..
    - Terminology
  - **Design:**
    - Stress classification, non linear analysis, fatigue curves and environmental effects, ageing effects on materials,
  - **Material and Manufacturing:**
    - EN ISO 9712 2012 for Non Destructive Examination personal qualification compatibility with ASME Sect. V, Sect. III
    - ISO 9606-1 2012 for Welders qualification compatible with ASME Sect. IX
    - Demonstration of lake of heterogeneity in materials
  - **Operation**
    - Methods of characterization of unacceptable flaws

CSWG – Some thoughts from Canada MDEP

* Is it necessary that the CSWG remain in place?
  * The formation of the SDO Convergence Board was an indirect result of the cooperation between the SDO's and the regulatory representatives on MDEP CSWG.
  * If the CSWG is disbanded, the focus for improvement will be lost. Codes and Standards have to be accepted by the regulatory authorities and the communication bridge necessary to achieve change on a global level will no longer exist.

CSWG – Some thoughts from Canada MDEP

* Is harmonization achievable?
  * The question is really; "Is convergence achievable?"
  * On the detailed technical level, there appears to be an appetite for making the technical rules between standards consistent. This would include qualification of personnel.
  * On a more general level where culture and methodologies have impact e.g., Quality Assurance, the progress will be significantly slower and even at times non---existent.
  * For convergence to be faster, agreement between regulatory bodies would have a significant impact; it is doubtful that this agreement could be reached to level in the near future that would allow such a result.

ASME View

- SDO Convergence Board provides a link between the SDO stakeholders and multiple regulatory authorities on MDEP CSWG
- MDEP CSWG Provides the “Reason” for the Existence of the SDO Convergence Board
- MDEP CSWG Regularly asks for updates from the Convergence Board
- MDEP CSWG provides the value added for the SDO stakeholders

ASME
SETTING THE STANDARD