

 Agence pour l'énergie nucléaire
Nuclear Energy Agency 

MDEP Stage 2 Pilot Project Policy Group decisions

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Goals of MDEP Stage 2

- Establish reference regulatory practices and regulations to enhance the safety of new nuclear reactor designs
- Increase cooperation among regulators to improve the effectiveness and efficiency of the regulatory design reviews

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Scope of the Pilot Project

- Assessment of similarities and differences in the regulatory requirements and practices of the participating countries in the following areas:
 - Licensing basis,
 - design review,
 - safety goals, and
 - in component manufacturing oversight.

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Conclusions of the Pilot Project

- The PG concluded that significant benefits would be gained for all members by:
 - Continuing with this multilateral effort,
 - Formalizing interactions and cooperative arrangements for specific reactor designs, and
 - Combining the stages of MDEP into a single programme.

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Conclusions of the Pilot Project

- Regarding convergence, the PG suggests that:
 - Increased cooperation would encourage and facilitate eventual convergence.
 - Convergence on specific reference regulatory practices and some requirements are feasible and would enhance cooperation.
 - Full convergence of regulatory requirements is not feasible in the short-term (i.e., for the reactor designs currently under review).
 - Progress towards convergence of regulatory practices and requirements for Generation IV reactor designs will be a natural outgrowth.

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MDEP Structure



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    PG[Policy Group] --> STC[Steering Technical Committee]
    STC --> EPR[EPR Working Group]
    STC --> DICS[Digital I&C Standards]
    STC --> AP1000[AP1000 Working Group]
    STC --> PBCS[Pressure Boundary component Codes and Standards]
    STC --> ODSG["(Other design specific working groups)"]
    STC --> MVIP[Multinational Vendor Inspection Program]
    STC --> OISG["(Other issue-specific working groups)"]
    
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Approved MDEP Programme (1/3)

Working groups

1. **Share information and cooperate on specific reactor design evaluations under current reviews**
2. **Undertake a multinational vendor inspection programme**
3. **Converge on codes and standards for pressure boundary components by completing the evaluation of their similarities and differences**
4. **Evaluate the similarities and differences in other codes and standards, beginning with a comparison of the digital instrumentation and control standards.**

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Approved MDEP Programme (2/3)

Interaction with on going activities

Complete the evaluation of the similarities and differences in the overall scope of the regulatory review and analysis for severe accidents and develop a draft reference scope of review.

Compare how top level safety goals are derived, expressed, achievement is judged among the participating countries, and determine the extent to which they can be considered equivalent.

Compare the approaches used for taking account of operating experience in regulatory reviews for new reactors.

Develop a programme to collect, share, and use construction experience feedback in regulatory reviews.

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Approved MDEP Programme (3/3)

NEA activities

9. **Develop a Legal Framework for maximizing co-operation**
10. **Establish Electronic Library for sharing information**

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Interaction with others

- **Non MDEP regulators**
- **Other organisations**
