

Report from Working Group D

Politics and economics

There was broad agreement that a 'one size fits all approach' to nuclear energy is inappropriate. States should decide upon what nuclear technologies to pursue on the basis of their particular circumstances and it is therefore inevitable that different states will make different choices. Thus, some states will pursue mining and not nuclear power, while others will pursue reactors without mining. Some will pursue both.

That said, most of the discussion focused on the challenges faced by states attempting to develop nuclear power. The useful role that the IAEA plays in helping states negotiate these challenges by technical cooperation and other activities (such as the publication of various guides) was frequently highlighted.

Financing

Many speakers recognised that, for a state pursuing nuclear power, financing is one of the biggest hurdles. The effect of the financial crisis was discussed. It was suggested that its consequences are currently unclear and, indeed, that its effects might be offset by reductions in commodity prices. Various factors that would make financing easier to come by were suggested. These include (i) a stable political environment; (ii) a stable legal environment (with a well-established safety authority and regulator as well as clearly set out liability laws); (iii) a willingness on the part of governments to share the risk with investors and (iv) public acceptance of nuclear power. In addition, the exclusions of nuclear energy from the clean development mechanism of the Kyoto Protocol and from projects eligible for World Bank funding were discussed. Although no objection to removing these exclusions was voiced, one speaker suggested that the practical effects of doing so would be limited.

Development of human resources

The need for a wide range of human resources from PhD physicists to competent welders was emphasized. In this regard, the following were identified as possible means to develop the appropriate skills base: (i) the utilization of existing expertise from other sectors (such as the oil and gas sectors); (ii) the development of specialist training centres (for high school as well as university graduates); and (iii) assistance from an external supplier and/or the IAEA.

The possibility of outsourcing reactor operation to an external supplier was also discussed. One speaker suggested that although this is a possibility, it might be difficult because safety ought to be the responsibility of the operator and potential operators might be reluctant to take this on in states in which they did not have complete control of operations.

Regulation

There was broad agreement on the need for a safety regulator that was both credible and seen to be so. The possibility of outsourcing this role to another state's

regulator was discussed. It was suggested that this would not be feasible because of the impossibility of guaranteeing that one state's regulator would not decide, at short notice, to cease its work in another state. The need for every state to conduct its own safety review of each reactor was also debated. A number of speakers suggested that this was unnecessary, citing the airline industry as an example of how a product used in many states could undergo safety review in just one. Others felt that it would be politically infeasible for each state not to undertake its own design review. The potential role of the IAEA in harmonizing design review processes so that states could more easily use one another's results was highlighted.