

Health impacts of nuclear power plants and case-study

International workshop on environmental and health impacts of lifetime extension of nuclear power plants,

Lisbon

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Introduction

- Social anthropology and public health
- Working in health, and other, impact assessment since 1999
- UK, continental Europe and further afield
- Health in
 - planning
 - EIA
 - SEA
- President-elect of the International Association for Impact Assessment (2019-2020)



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- Case study: Wylfa Newydd
- Health impacts of nuclear power plants
- Reflections

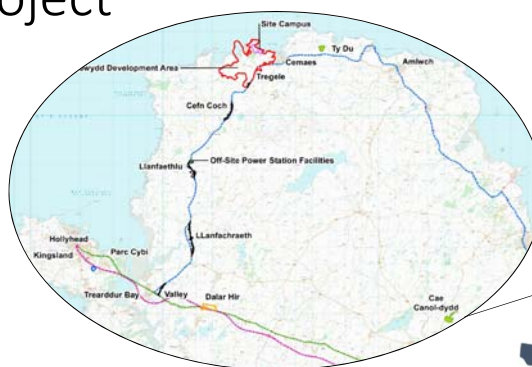


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Wylfa Newydd Project

A proposed new nuclear power station, including

- two UK Advanced Boiling Water Reactors (UK ABWRs) to be supplied by Hitachi-GE Nuclear Energy Ltd.,
- supporting facilities,
- buildings,
- plant and structures, and radioactive waste, spent fuel storage buildings and
- apparatus to transfer electrical energy to the National Grid high voltage electricity transmission network



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Context

- An examination of the application for the Development Consent Order was held by the Secretary of State for Great Britain and Northern Ireland and concluded on 23rd April 2019.
- There is a six month timetable for a decision.
- Close to site of a former Magnox power station
- This history was central to local understanding of the proposed new power station.
- The application included a range of assessments
 - EIA; HIA; Welsh language etc



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HIA scope

- Air quality
- Noise
- Housing
- Transport
- Demand for medical and healthcare services
- Lifestyle and behaviour
- Community identity, social networks and culture
- Employment, income and economic development
- Education and training
- Physical activity
- Public understanding of risk
- Energy generation demand and affordability
- Energy generation: low carbon technology

HORIZON
Nuclear Energy

Wylla Newydd Project
S.S. Health Impact Assessment Project

HIA Reference Number: 14025027
Application Reference Number: 0.1P

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HORIZON NUCLEAR

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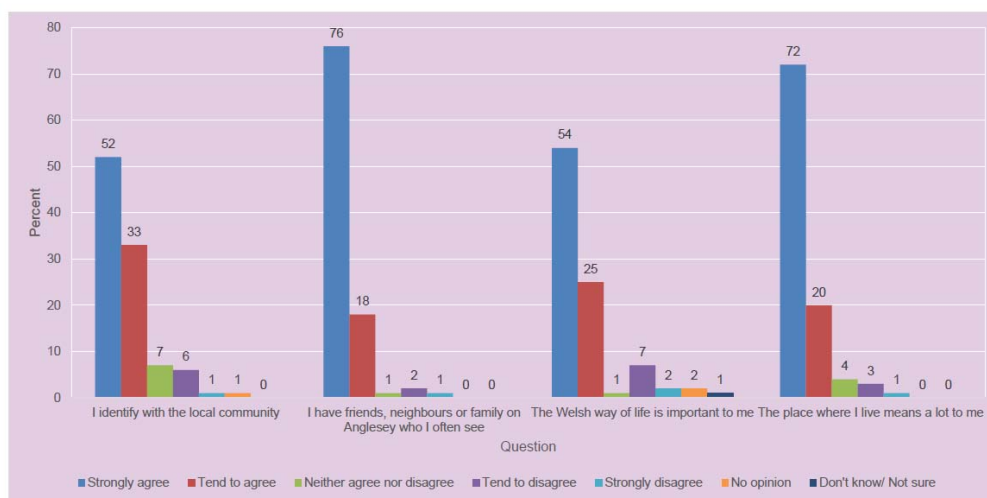
Radiation

- National Policy Statement (EN-6 s.3.12.11) is clear that the application for development consent should be determined on the basis that regulation would adequately mitigate radiation exposure to workers, the public and the environment.
- Quantitative analysis of radiological risks was presented in the radiological effects chapter of the Environmental Statement
- ‘Public understanding of risk’ assessed via survey (see following slides) and other consultation
- HIA included a review of environmental epidemiology: childhood leukaemia and ionising radiation



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Community survey: question 2

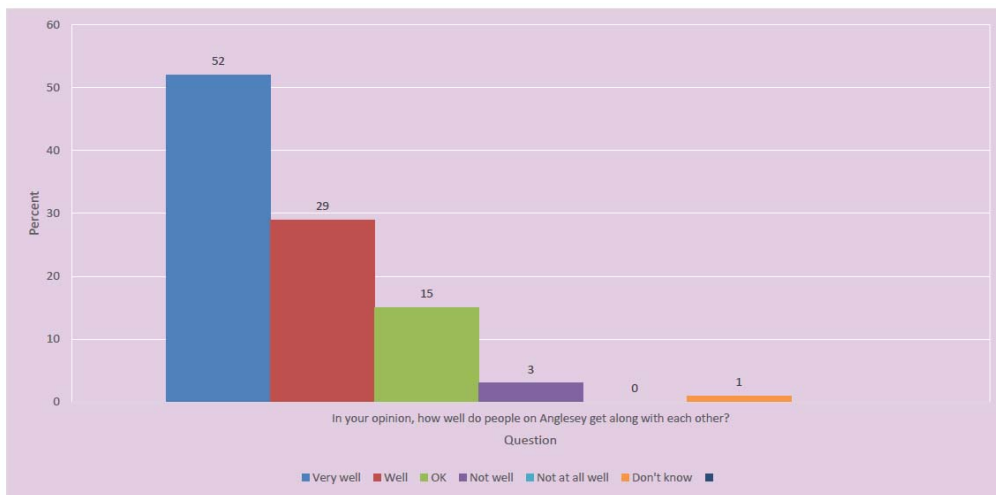


Horizon Nuclear Power, Health Impact Assessment Report (2018) [https://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/projects/EN010007/EN010007-001739-8.19%20Health%20Impact%20Assessment%20Report%20\(R%20Rev%201.0\).pdf](https://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/projects/EN010007/EN010007-001739-8.19%20Health%20Impact%20Assessment%20Report%20(R%20Rev%201.0).pdf)



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Community survey: question 3

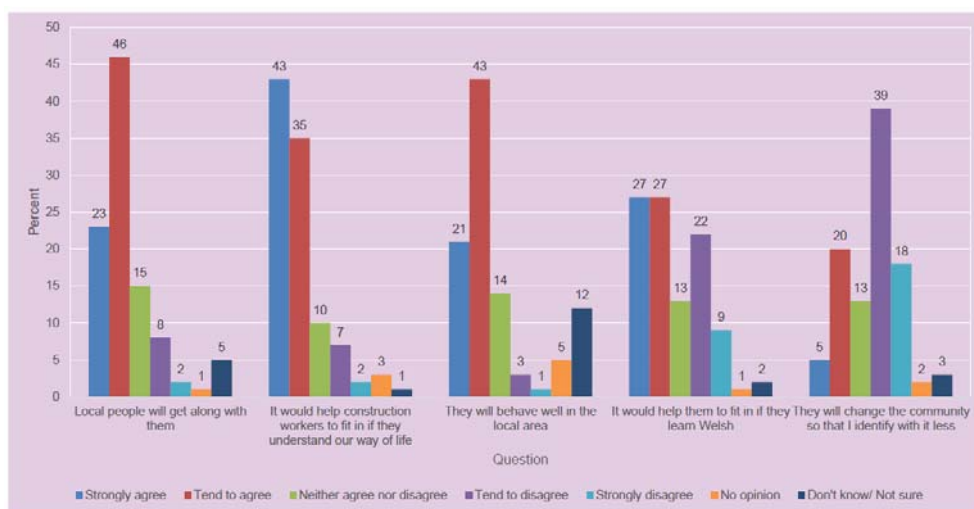


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Community survey: question 5

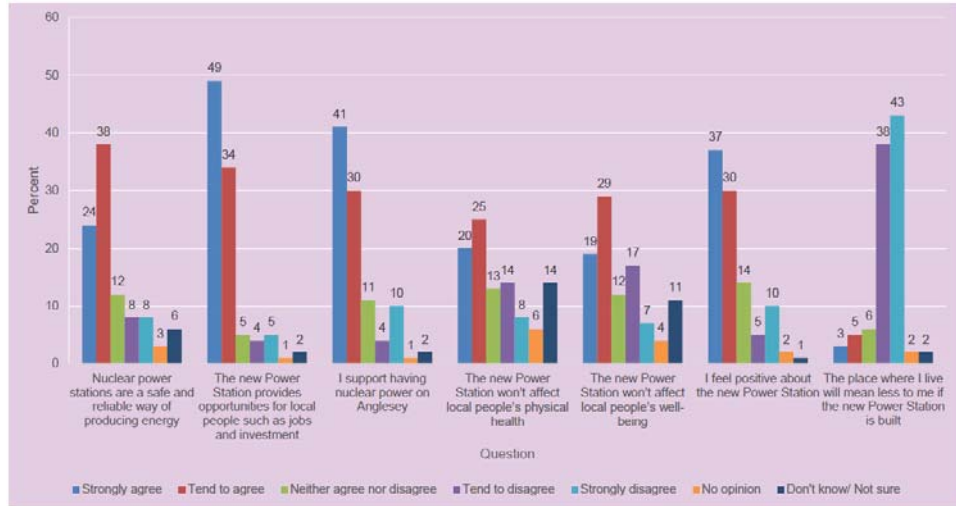


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Community survey: question 6



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Reflections



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Thank you

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