As your operating plant comes towards the end of its design life an ageing asset life assessment is vital to ensure the impact of ageing does not increase the risk of a major accident. Helping you to meet future production requirements safely well beyond the plant’s design life, effectively providing a focus for your finances and effort.

The HSE commissioned a study to determine the significance of ageing in terms of major accident potential (RR823). The data showed that approximately, “60% of incidents are related to technical integrity and, of those, 50% have ageing as a contributory factor”, there is also increasing pressure to run assets beyond design life because replacing them is expensive or problematic. Before deciding to extend an asset’s life operators must prove to themselves, and often the regulators, that the asset is fit and safe to operate.

This can be a difficult hurdle to overcome. Once assets run beyond their design life new failure mechanisms and integrity problems occur that site personnel may have not previously encountered. In some cases this can lead to major unacceptable incidents and in many cases can cause production to cease unexpectedly and result in costly emergency repairs to get the asset back online.

Obsolescence and the organisation’s capability to support the assets over the long term are also key factors.

**What we offer?**
ABB can provide an independent assessment of asset life and the opportunities for life extension with an approach consistent with HSE RR509, HSE RR823, API 579 and API580. The study covers equipment condition, systems and practices, competencies and skills. The outcome demonstrates clearly a life extension or remnant life and identifies future requirements to maintain the required equipments’ integrity and reliability as well as generate an investment plan, if appropriate.

We do this by:
- Reviewing key issues affecting asset life
- Determining a view of equipment life based upon deterioration mechanisms, and other life limiting factors (e.g. obsolescence)
- Categorising equipment on its lifecycle
- Developing recommended actions to maintain integrity
- Providing a detailed profile of future investment required, where appropriate

“Ageing is not about how old your equipment is; it’s about what you know about its condition, and how that’s changing over time.” (HSE)
The ageing asset life assessment follows ABB’s pRIME philosophy. pRIME (process Reliability and Integrity Management Excellence) is about the asset and integrity management improvement journey; it's recognising the symptoms, diagnosing the issues, and implementing improvement. The pRIME approach is a consultancy programme supported by tried, tested, consistent and coherent methodologies and capability. Following pRIME means a beneficial, cost effective sustainable solution. All processes are risk based, ensuring that effort is concentrated on areas that will give the highest return. This approach is supported by a coherent set of IT tools (pRIME toolkit), providing a consistent and efficient approach.

Benefits
The study will provide the client with:

- An assessment in line with the HSE RR509 (ABB co-authors) and RR823 plant ageing research reports
- An aid in providing justification to the authorities that the plant is fit and safe to operate for its intended life
- A basis for ongoing asset life planning and the implementation of risk based philosophies, which will ensure resources are focused in the right areas
- Identification of potential failures which can be avoided before an accident, incident or loss of production occurs
- More effective and cheaper sustenance repairs, saving breakdown costs
- Confidence in the integrity and availability of the asset through the remaining or extended term
- Optimised investment to achieve the required life extension

Why ABB?
ABB offer the complete solution; we can provide the assessment right through to the implementation of resulting actions to ensure the asset is fit for its intended life. Our experienced specialists will apply their process based and operational heritage to provide pragmatic advice and solutions. Each equipment type is studied by appropriate specialists. The team are fully versed in the legislative and good practice requirements for both onshore and offshore assets. ABB have conducted over 100 multi functional studies in many parts of the world and in different industries both onshore and offshore. We not only help deliver the action plans but also impart knowledge through knowledge transfer agreements and software for ongoing use by the client.