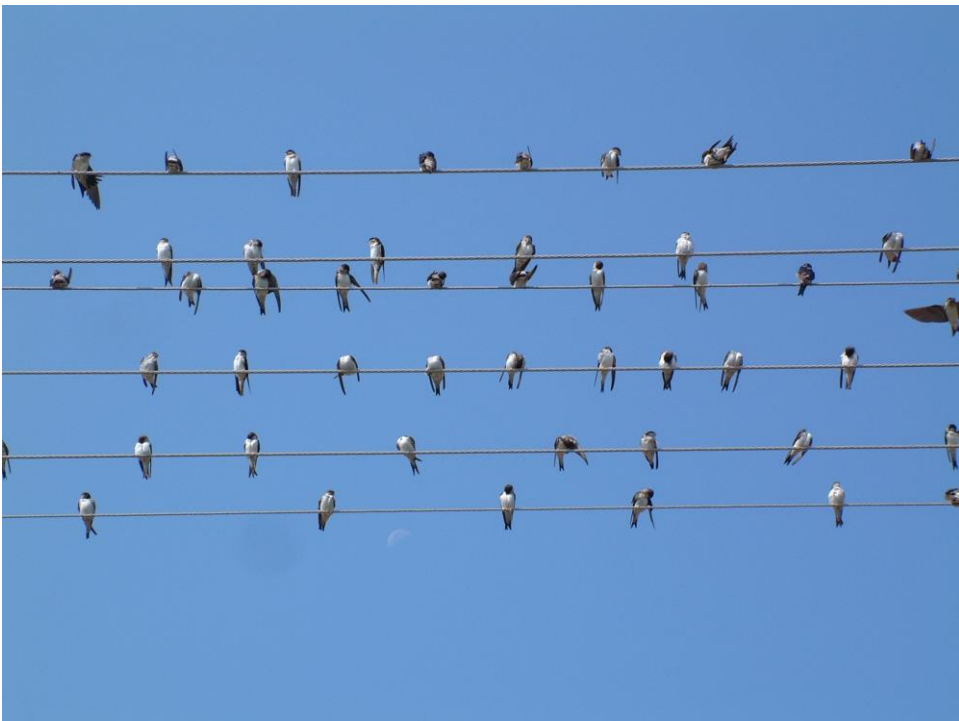


Paks II Nuclear New Build project

Prof. Dr. Attila Aszódi

Secretary of State for the maintenance of the capacity of the Paks NPP, PTNM

UK-CEE Nuclear Energy Summit, Budapest
Budapest, 30th October 2018.



Undeveloped infrastructure



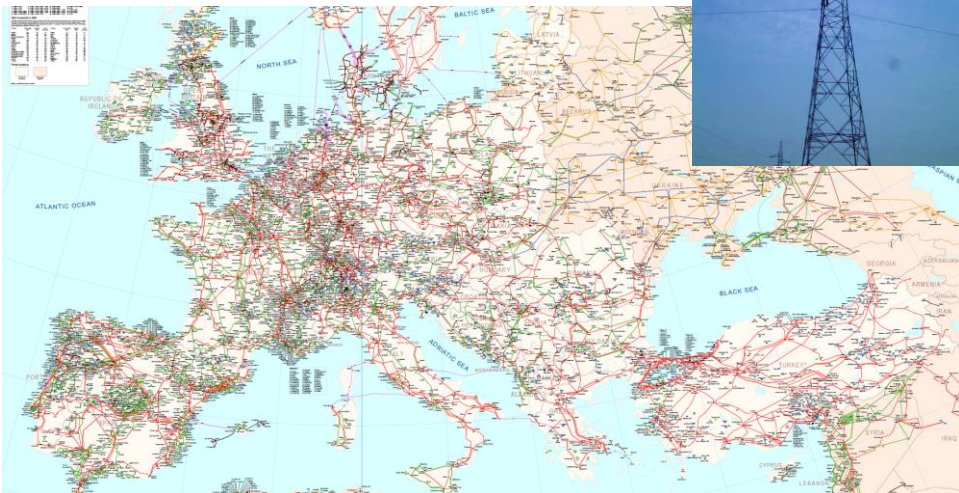
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Source: internet

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Well developed electricity grid in Europe
ensures security of supply today

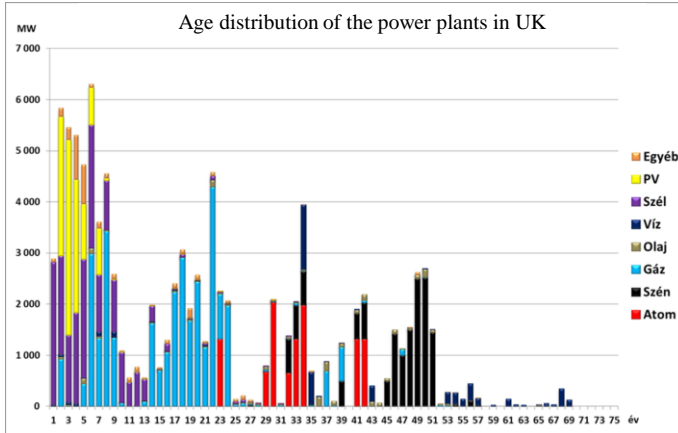


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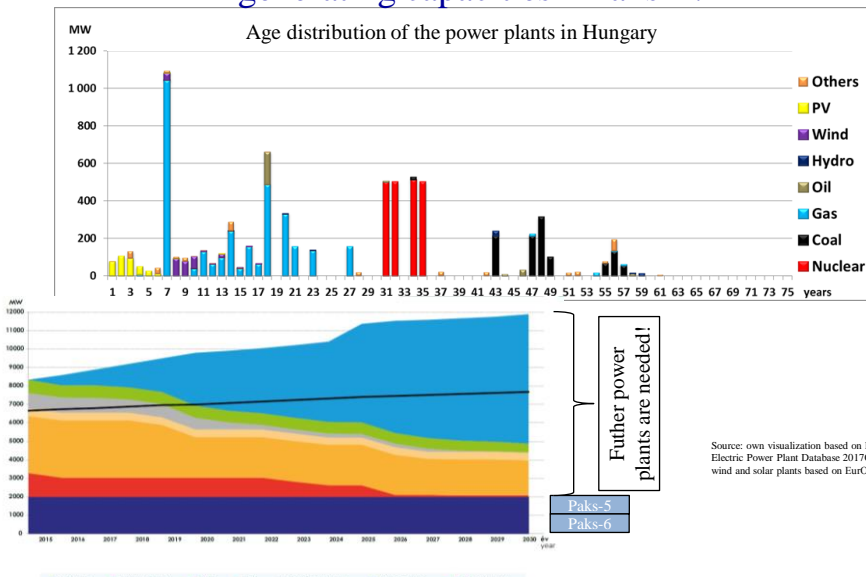
Generation capacities in the UK – HPC



- Conventional power plants are getting older
- Challenges related to climate protection and security of supply
- *(the situation is obviously similar to the Hungarian one)*

Source: own visualization based on Platts World Electric Power Plant Database 2017Q4, incase of wind and solar plants based on EurObserv'ER

Maintenance of the Hungarian nuclear generating capacities – Paks II.



Source: own visualization based on Platts World Electric Power Plant Database 2017Q4, incase of wind and solar plants based on EurObserv'ER

Paks II – negotiations with the EU

- Signature of the Intergovernmental Agreement (IGA):
14th Jan 2014
- **Topics discussed with the Commission**
 - 1) COM informed HU about „no objection” against IGA (Jan 2014)
 - 2) Co-signature of **fuel supply contract** (by ESA in April 2015)
 - 3) COM replied to the **notification** according to **Art 41** of Euratom Treaty: Paks II. fulfills the objectives of the Euratom Treaty (Sept 2015)
 - 4) DG ENVI: 5. § in Paks II. Project act (access to specific information) – Legislation amended in March 2016 – COM accepted.
 - 5) DG GROWTH: Tendering
 - Case dropped in Nov 2016
 - 6) DG COMP: State aid
 - Accepted in March 2017
 - Detailed decision published on 16th October 2017



The last topic was closed with the Commission in March 2017.



Austria appealed the decision of the Commission

- case T101/18, opened on February 21, 2018
- Hungary submitted its intervention supporting the Commission
- several other Member States also did so (UK+V4)



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Chronology of the British HPC case

- 18 December 2013: **the Commission starts the investigation** related to the state aid case of the HPC project
- 8 October 2014: decision of the Commission about the **lawfulness of the state aid**
- 6 July 2015: **Austria challenges the decision** on the court
- 12 July 2018: **the Court dismisses the appeal of Austria**



Nature of the aid:

- Contract for Difference schema
- Compensation in case of stopping for political reason
- Loan guarantee

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HPC – the main elements of the Court’s decision - 1

- Promoting the construction of new nuclear capacities is **common public interest**

„... the Commission confined itself to noting that the promotion of nuclear energy constituted a public interest objective for the purposes of Article 107(3)(c) TFEU.” (Article 113 of the Decision)



- Euratom Treaty is “in full force”, and is a **basis for the promotion of nuclear energy**

„...the objective of promoting nuclear energy and, more specifically, that of incentivising undertakings to invest in new nuclear energy generating capacity, satisfies the requirements laid down in Article 107(3)(c) TFEU and in Article 2(c) of the Euratom Treaty” (Article 144 of the Decision)



- Member States have the right to decide upon the promotion of nuclear energy as a public interest** objective for the purposes of that provision

- According to TFEU each Member State has the right to **choose between the different energy sources those they prefer**

The Member States have the right to determine the conditions for exploiting their energy resources, their choice between different energy sources and the general structure of their energy supply (based on Article 194(2) TFEU)



Source: Judgement of the General Court in the HPC case
<https://curia.europa.eu/jcms/upload/docs/application/pdf/2018-07/cp180104hu.pdf>
<http://curia.europa.eu/juris/liste.jsf?num=T-356/15>

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HPC – the main elements of the Court’s decision - 2

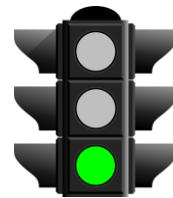
- It is not possible to address the future demand by solely relying on renewable energies** while closing the existing nuclear power plant and coal fired power plants

„According to the Commission’s findings, it is not possible to address the future gap in energy generating capacity caused, on the one hand, by the increase in demand and, on the other, by the closure of existing nuclear power stations and coal-fired power stations solely by relying on renewable energies.” (Article 405 of the Decision)



- Nuclear energy** represents a **reliable baseload electricity supply**, unlike numerous intermittent renewable sources, **and intermittent sources can not be an alternative to baseload capacities**

„the Commission found that the intermittent nature of many renewables technologies did not allow them to be a suitable alternative to a baseload technology such as nuclear energy...” (Article 413 of the Decision)



- Construction and operation of a **nuclear power station covers the generation of baseload energy** with a view **to ensuring security of supply**

„... the Commission took account of the fact that nuclear energy represents a baseload method of electricity supply, that is to say, a form of continuous energy generation that is not intermittent, unlike numerous technologies for generating energy from renewable sources.” (Article 405 of the Decision)



Source: Judgement of the General Court in the HPC case
<https://curia.europa.eu/jcms/upload/docs/application/pdf/2018-07/cp180104hu.pdf>
<http://curia.europa.eu/juris/liste.jsf?num=T-356/15>

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IPCC Report on 8/10/2018

„Nuclear power increases its share in most 1.5°C pathways by 2050...”

„There are also analyses that result in a large role for nuclear energy in mitigation of GHGs.”

- **Based on 89 scenarios for 2050, limiting the global warm-up to 1.5°C: the role of nuclear generation is stable, around 10% → share of nuclear maintained, the global capacity increases**



Median of the electricity generation [EJ] (min, max)			
Year	2020	2030	2050
Total	100.09 (min:83.53) (max:113.98)	120.01 (min:81.28) (max:177.51)	224.78 (min:126.96) (max:363.10)
Nuclear	10.84 (min:8.52) (max:18.55)	15.49 (min:6.80) (max:41.73)	22.64 (min:3.09) (max:115.80)
Change compared to 2020 (mean)		~ +43 %	~ +109 %

Source of data: http://report.ipcc.ch/sr15/pdf/sr15_chapter2.pdf
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Status of the Paks II. project



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