

## Facts and figures on Mühleberg nuclear power plant



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| Mühleberg nuclear power plant  | Boiling water reactor   |
| Commercial startup   | 6 November 1972   |
| Capacity <ul style="list-style-type: none"> <li>- At startup</li> <li>- Today</li> </ul> | 302 MW (net)<br>372 MW (net)  |
| Production 2010  | Approx. 3 billion Kilowatt hours  |
| Production since startup   | 102 billion Kilowatt hours <ul style="list-style-type: none"> <li>- In 2009 the KKM accounted for 5.2% of the electricity consumed in Switzerland (Source: FOE energy consumption statistics for 2009: 57.5 billion kWh)</li> </ul> |
| Availability   | 93.3 %<br>Exceptionally high availability by international standards<br><br>By way of comparison:<br>Availability of Juvent wind farm: approx. 30%<br>Availability of Stade de Suisse: approx. 10 %                                 |
| Number of fuel rods per year   | 36  |
| Amount of enriched uranium per year  | Approx. 7 tonnes  |
| Number of consumers supplied   | Around half a million   |
| Direct and indirect added value generated per year                                       | CHF 118 million (Source: BAK Basel Economics, 2007)   |
| Number of employees (2010)   | 330 (+700 during the annual revisions)  |

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| Number of ENSI inspections in 2010  | 90 per year   |
| Contribution to climate protection since startup  | Approx 42 million tonnes of CO <sub>2</sub> saved, measured against emissions from a 400-MW gas-fired combined-cycle power plant [Bauer et al./PSI 2008; NPP: 6g/kWh, CCGT: 426g/kWh]   |
| Production costs  | <p>Approx. 7 cents per kWh</p> <p>By way of comparison: Production costs of</p> <ul style="list-style-type: none"> <li>- Biomass power plant: 17-21 cents per kWh</li> <li>- Wind farm: 18 – 29</li> <li>- Small hydroelectric power station: 24 – 40</li> <li>- Photovoltaic plant: 40 – 74</li> </ul> <p>(Sources: Federal Office of Energy (FOE), Swiss Academy of Technical Sciences (SATS), Paul Scherrer Institute (PSI); International Energy Agency (IEA), BKW FMB Energy Ltd</p> |
| Energy security   | <ul style="list-style-type: none"> <li>• BKW's largest power generating facility, covering around 40% of electricity requirements in the supply region.</li> <li>• Key pillar in ensuring security of electricity supplies in north-western Switzerland.</li> <li>• Reliable source even under exceptional circumstances (e.g.- storms such as Hurricane Lothar, Cyclone Vivian)</li> </ul>   |
| To achieve the same annual output as the KKM using other technologies would take roughly... | <ul style="list-style-type: none"> <li>• 20 run-of-river power plants the size of Bannwil</li> <li>• 740 2-MW wind turbines of the dimensions of Juvent; they would cover a surface area equivalent to around 3 times the size of Lake Thun</li> <li>• 2278 Stade-de-Suisse solar power plants</li> <li>• 2,476 biomass power plants on the scale of Ittigen</li> </ul>   |
| Other comparisons   | <ul style="list-style-type: none"> <li>• The KKM takes 3 hours to generate as much electricity as the Stade de Suisse solar power plant generates in a year.</li> <li>• In 2007/08, measures to optimise the turbine systems resulted in a 134 GWh increase in the KKM's annual output: equivalent to the annual production volume of around 30 Juvent wind turbines (2 MW each)</li> </ul>   |