



An ex ante assessment of the new French electricity law

François Lévêque

Mines ParisTech

(francois.leveque@mines-paristech.fr)

EPRG & CEEPR European Electricity Workshop

Berlin, 15 July 2010

Introduction

- The French Parliament adopted in June 2010 a bill relating to the New Organisation of the Market for Electricity (NOME, hereafter)
 - As recommended by Champsaur Commission (see Crampes & alii, 2009), it implements regulated access to nuclear electricity until 2025 and it progressively eliminates regulated retail tariffs for industry (while maintaining them for households)
 - As recommended by Poignant-Sido report on generation adequacy, it plans to create a capacity obligation scheme
 - As required by the EU Commission, it reforms the local electricity tax
- France passed 6 electricity Acts from 2000 up to now, will NOME Act succeed and last? Will its objectives be achieved?

Legal calendar

- Draft bill proposed by government (April 2010)
- Discussed, amended and adopted in first reading by National Assembly (June 2010)
(Our talk is based on this last but provisional version of the Act)
- Discussion, amendment and adoption by Senate, then second reading at National Assembly (September 2010)
- Issuance of decrees and orders complementing the NOME Act (October–November 2010)
- Nomination of new commissioners of the energy regulatory authority (December 2010)
- Entry of NOME Act into force expected in January 2011

Political background

EU Commission' pressures

- Alleged failure to implement Directive 2003/54 (maintenance of regulated tariffs for non residential consumers), Official Notice, April 2006
- State aid infringement proceedings to investigate the regulated tariffs benefiting certain large end medium-sized companies (opened in June 2007)
- Failure to implement Directive 2003/96 on energy taxation (second stage of infringement, June 2010)

French electricity to French consumers! a large political consensus (unfortunately)

- “It is legitimate French consumers benefit from competitive advantages of French power generation capacities” Champsaur Commission's report (May 2009)
- “The government [wants] to preserve, for all consumers, the benefit of the investment carried out for the development of nuclear power through prices and tariffs reflecting the industrial reality” Draft bill, explanation of purposes (April 2010)
- “This [act] has appeared as the best way to enable our country to protect its nuclear fleet and continue to make French its benefiter” M.P. P. Ollier, National Assembly (June 2010)

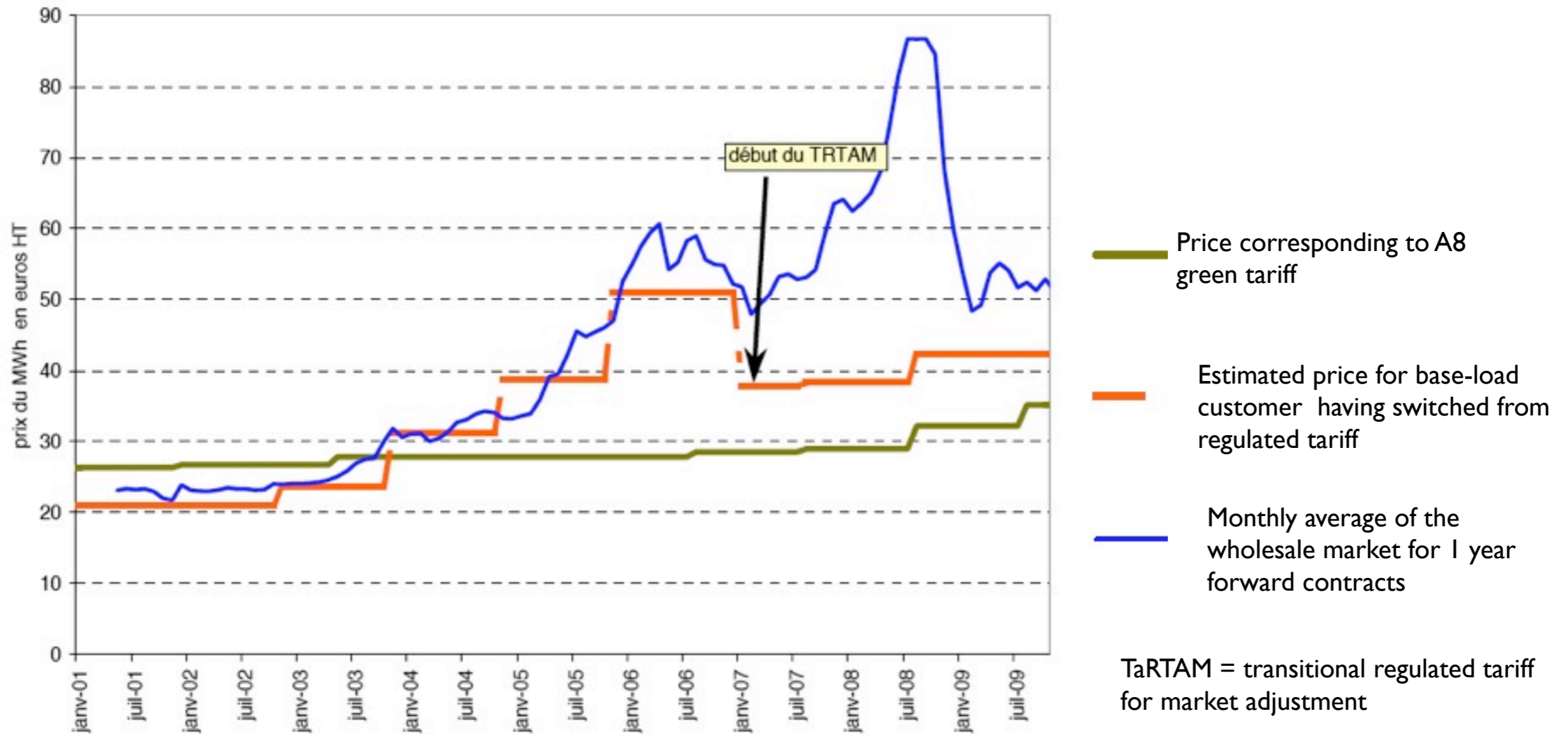
Market background 1/3

Market segments and regulated tariffs

Regulated Tariff	Market segments
Blue	Residential and professionals
Yellow	SMEs/SMIs consumers
Green	Large consumers
TaRTAM	Mostly SMEs/SMIs and large

TaRTAM = transitional regulated tariff for market adjustment

Market background 2/3



Comparison of trends in supply and wholesale prices, excluding transmission, in current euros (source: Impact assessment, 2010)

Market background 3 / 3

Retail tariff for small consumers (i.e., blue tariffs) will remain until 2025

All remaining retail tariffs (i.e., green and yellow tariffs) will be eliminated in December 2015

Elimination of TaRTAM tariff 31/12/2010

	Residential customers				Non-residential customers			
	Number of sites	Consumption	Number of sites	Consumption	of which free market offers (exc. TaRTAM)		of which TaRTAM	
					Number of sites	Consumption	Number of sites	Consumption
EDF	28,515,000	135.4 TWh	4,487,000	259.0 TWh	382,795	59.4 TWh	2,205	44.6 TWh
Alternative suppliers	1,385,000	5.6 TWh	367,000	39.0 TWh	365,705	9.6 TWh	1,295	27.4 TWh
total	29,900,000	141.0 TWh	4,854,000	298.0 TWh	748,500	69.0 TWh	3,500	72.0 TWh
EDF	95.4%	96.0%	92.4%	86.9%	51.1%	86.0%	63.0%	62.0%
Alternative suppliers	4.6%	4.0%	7.6%	13.1%	48.9%	14.0%	37.0%	38.0%

Market share in accordance with tariff offers at 31 December 2009

CRE Data

Market segments and market shares of suppliers
(source: Impact assessment, 2010)

The future regulated access to EDF nuclear power generation

- A quantity regulation
 - The maximum volume cannot exceed 100 TWh (+ 20TWh for network operators to buy losses)
 - It is allocated to each supplier according to the consumption of final consumers it supplies in France
- A price regulation
 - at full costs (return on capital, operating expenses, maintenance, investments for extending the period of operating authorisation, dismantlement and waste disposal)
 - a price supplement for any quantity attributed in excess to the alternative supplier
 - Only general principles are set in the act, details will be set in decrees
- Initially, the price will be set in a decree (expected in November 2010). It has to be consistent with the implicit price of base-load power integrated into the TaRTAM. Over the next three years it will be set by the ministers in charge of energy and finances (not by the regulatory authority)

A few appraisals

- A cost-benefit analysis of Champsaur commission recommendation to introduce a regulated access tariff to EDF nuclear fleet. “[it] is likely to be welfare-detrimental” (Crampes et alii, 2009)
 - High regulatory costs + lower performances in production / small benefits from more competition and innovation in supply
- An impact assessment of Nome’s bill carried out by the government (April 2010)
 - “[Nome] will permit alternative suppliers to make competitive offers [...] medium-sized and major consumers to benefit from competition [...] will provide a guarantee of better visibility for EDF [...] should contribute to significantly improving the functioning of the market”
- An economic analysis of the impact assessment “The impact study is blindly optimistic” (F. Lévêque and M. Saguan, 2010)
 - What is said to be a future certain success is in fact either a certain failure or an uncertain outcome
- An avis from the French Competition Authority on Nome draft bill (May 2010) “The regulated access to base-load electricity is a kind of administered economy”
 - NOME might not result in creating effective competition

Ex ante assessment of goal effectiveness

- Could the NOME Act's objectives be achieved?
 - effective competition in supply (short term) and in generation (long term)
 - innovation creation and diffusion
 - efficient investments in base-load and peak generation
 - maintaining the benefit from nuclear rent to consumers
 - stable legal and regulatory framework
 - end of proceedings initiated by the EU commission
 - absence of wind-fall profits for alternative suppliers
 - neutral financial impact for EDF
- Limitations: nor the definite version of the act, neither decrees for application and orders have been issued, yet; the capacity obligation scheme is not designed; the level of the regulated nuclear access tariff is not known; the future evolution of retail regulated tariffs is not known, neither

Which initial level for the regulated nuclear access tariff?

- In principle, aligned with the base-load component of TaRTAM,
 - Energy component = TarTAM minus network tariffs (but different transmission/distribution tariffs and integrated tariffs according to different type of customers and load curves)
 - Base-load component = energy component minus peak-load component (with different possible values of peak-load component depending on considered wholesale prices and different proportions base/peak-load)
- In practice, between 38 €/MWh (according to CRE) and 42 €/MWh (according to EDF) while GDF Suez claims 35€/MWh to make competitive offers to small consumers purchasing their power at blue tariffs
- Reminder: for EDF a variation of 1 € in the regulated access tariff means a variation of € million 100 in its future annual revenue from the supplying to its competitors (100 TWh) ||

Which future evolution of retail tariffs?

- In 2015, the retail integrated tariffs for small consumers (blue tariffs) and large consumers (yellow and green tariffs) are supposed to be consistent with the then regulated nuclear access tariff
- Today the implicit base-load component of yellow/green (resp. blue) tariff amounts to 32 €/MWh (resp. 35) over a total of 80 €/MWh (resp. 90 €/MWh) without tax. Assuming the regulated nuclear access tariff is initially set at 40 €/MWh, the catching-up means a 10% increase (resp. 5%) in the bill of large (resp. small) consumers. Moreover, up to 2015 other increases will likely have to be passed on into retail tariffs: the access tariff itself to take investments in life plant extension into account; the cost of capacity obligation; the transmission and distribution tariffs because new investments are needed; the subsidies for renewable which increase because wind and solar capacity extends; (to say nothing on a possible increase in peak-load prices)
- Will these increases be socially acceptable and politically manageable, and thus decided by the government? It will end an historical period of decrease in electricity price in constant euro

NOME achievement regarding competition (2011– 2015)

- Main assumptions: initial regulated access tariff set at 40 €/MWh, yellow and green tariffs are increased to be consistent with this level, but no catching up for blue tariffs
- No significant change in retail market for small consumers
 - French consumers' preference for regulated tariffs remains and those tariffs continue to be difficult to be offered by alternative suppliers
 - basically, NOME will only enable new entrants to stop to lose money in serving their today customers (4% market share)
- Effective competition in the retail market for large consumers
 - the market segment corresponding to ex TaRTAM customers and customers who switched from regulated tariffs is immediately (i.e., January 2011) contestable (Å140 TWh)
 - yellow and green tariffs customers become progressively contestable (Å 140 TWh)

Post 2015 competition in retail market for large consumers

- Main assumptions: yellow and green tariffs are eliminated, the 100 TWh cap is reached and not extended
- The price large consumers will then pay is close to the wholesale market price
 - Once EDF has fulfilled its contractual and legal obligations (e.g., long term exports contracts, supplying blue tariffs consumers), its remaining nuclear power capacity is not large enough to serve the whole non-residential national demand for base-load
 - This market will exactly operate as if there was no regulation. However, alternative suppliers will get a windfall profit (they will sell close to the wholesale market price the 100 TWh they purchase at the regulated access tariff)
- NOME supporters wrongly expect the equilibrium price will be close to the weighted average costs of supply (e.g., 85% purchased at the regulated access price + 15% bought on the wholesale market) and therefore that consumers will continue to benefit from nuclear cost advantages. (Of course, they are right if EDF sets its price approximately at this level for the other suppliers will have to follow. It means however that EDF does not seek to maximise its profit and that its main stockholder, the French State, will force EDF in some way not to increase its retail price once the retail tariffs are eliminated)

Competition in generation at long term (2020–2025)

- NOME will (modestly) contribute to increase competition in supply but the critical point is competition in generation
- NOME's regulated access disincentivises EDF competitors to invest in base-load and semi-base-load generation capacity. As buyers of regulated nuclear electricity they do not take any operating and investing risks
- NOME's impact on investments in peak-load capacity mainly depends on the design of the capacity obligation scheme. Note that such complex mechanisms rarely work well at the beginning and that the design is here complicated by the problem of compatibility with the national regulated access scheme and the regional wholesale market
- Moreover, unlike NOME's supporters claim the new Act will not provide investors with a stable regulatory framework and a long term visibility

Instability and lack of visibility

- Tariff setting is not shelved from government intervention (will tariffs increase be decided ? Will the windfall profit subsequent to the elimination of yellow and green tariffs be tolerated?)
- Inconsistency between regulated access and retail tariffs can last
- The capacity obligation scheme is not defined, yet
- The EU legal compatibility of NOME is questionable
- As mentioned in the explanation of purposes of the draft bill (April 2010) the reform sets a “developing and dynamic framework of regulations”, and the Act forecasts periodic reports that the government will submit to Parliament in particular on the basis of the reports from the regulatory authority and the competition authority. Ironically, the first government report is scheduled at the wrong moment: in 2015, that is too late after the first choc of TaRTAM elimination and too early to see the effect of the second choc, that, is the elimination of yellow and green tariffs

Conclusions

- It is likely NOME will be very transitory, that is, a life duration lower than 5 years. It may be seen as a new TaRTAM: a new way to prolong regulatory tariffs for industry for a few years
- France has chosen an anti-market and anti-European energy law to preserve the benefits of its past bet on nuclear power generation to French consumers
- The regulated access to the EDF historical fleet is supposed to enable competition in supply while keeping price close to nuclear costs for consumers. The problem is that the latter requires the maintenance of retail regulatory tariffs and this maintenance hinders the development of competition in supply. In other terms, the regulatory nuclear access fails to protect consumers once retail tariffs are eliminated
- One day France will have to accept that market opening requires other means than retail tariffs to transfer the nuclear rent to French (e.g. taxing EDF extra-profits) and wholesale tariffs to enable competition in supply (e.g., co-ownership of plants).