SAWEA submission to the public hearing relating to the NERSA review of the REFIT tariffs

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Overview

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5. Summary

1. Who we are and our vision

- Very representative industry body for wind in SA
- Purpose
  - "to promote the sustainable use of wind energy in South Africa"
  - "act as a central point of contact"
  - "promote wind energy to government, industry, the media and the public"
  - "facilitate the exchange of technical information, expertise and experience in the wind energy sector"
- Confident we can deliver the wind power in IRP1 and IRP2010 and more
- We see the biggest challenge as maintaining investor confidence given the slow REFIT roll-out, general regulatory hurdles and costs.
- The first 1,000 MW's are crucial and me must get there asap
- We want to assist for an optimal COP17 showcase of RE in SA

2. NERSA's regulatory mandate

a) *"to achieve the efficient, effective, sustainable and orderly development and operation of electricity supply infrastructure in South Africa;*

b) *to ensure that the interests and needs of present and future electricity customers and end users are safeguarded and met, having regard to the governance, efficiency, effectiveness and long term sustainability of the electricity supply industry within the broader context of economic energy regulation in the Republic;*

c) *to facilitate investment in the electricity supply industry;*

d) *to facilitate universal access to electricity;*

e) *to promote the use of diverse energy sources and energy efficiency;*

f) *to promote competitiveness and customer and end user choice; and*

g) *to facilitate a fair balance between the interests of customers and end users, licensees, investors in the electricity supply industry and the public."*

2. NERSA's regulatory mandate (cont.)

- SAWEA supports tariff review as "narrow" (f - g) NERSA mandate to keep costs low
- We stress NERSA's broader mandate (a-e) to be the custodian of our collective energy well-being which requires establishing a successful and strong wind industry
- Investors have proceeded thinking a change would only come after first procurement
- We think new tariff should apply 2014 – while the old one should apply until then

3. Qualitative responses (on policy and supporting regulatory framework)

3.1 Ancillary benefits funded by the REFIT

3.2 The importance of stable REFIT assumptions and methodology

3.3 Unexpected changes since REFIT announcement

3.4 The IRP 2010 and the fundamental role of wind power

3.5 Sending the right investment signal

3.6 Status of the procurement process

3.1 Ancillary benefits potentially funded by the REFIT

1. BBBEE
2. Smaller players/new entrants
3. Local Economic Development and Enterprise Development
4. Emissions reductions
5. Reductions in water consumption
6. De-risking of the SA economy by using less volatile priced fossil fuels
7. Rural development
8. Skills development

3.2 The importance of stable REFIT assumptions and calculation methodology

- Assumptions and calculation methodology like the Constitution
- Provides long-term certainty that over-rides the imperatives and uncertainties of the day
- Investors in wind have by definition accepted risks like exchange rate fluctuations
- Cannot accept the risk that assumptions and/or methodology change without very good reason
- A perennial argument between stakeholders about assumptions and methodology should be avoided at all costs – make transparent like recalculation of fuel price
- A decision not to allow indexation of capital would be an example of a fundamental change that "breaches the Constitution" of REFIT
- For these reasons SAWEA has proceeded on the assumptions and methodology of 2009
- Not even the 17% real IRR equity hurdle is being discussed or addressed
- The final REFIT scorecard my require a change of "Constitution" (acceptance of a standardised PPA, local economic development, BBBEE, "Viable network integration requirements", Under-written debt, Preference for small distributed generators over centralised generators)

3.3 Unexpected changes since REFIT announcement

- Fixed price tender rather than pure REFIT
- Dove-tailing of regulatory regimes became even more essential
- Delays with permitting became potentially ruinous
- Understanding in industry was price would hold until after 1st procurement
- ZAR 400 million + estimated to have been spent by wind alone preparing for REFIT

3.4 The IRP 2010 and the fundamental role of wind power

- Additional 8,400 MW's of wind power
- Big responsibility which we embrace
- Must avoid pitfalls, disillusionment and disinvestment created by peakers, PNCP, MTPPP initiatives

3.5 Sending the right investment signal

- The first 1,000 MW's procured will create the investment attitude and confidence/distrust
- Vital for the long term that developers and investors have a positive experience
- COP17 will create considerable scrutiny
- The wind farms pursued with the old tariff fit with the old tariff due to technical reasons (site accessibility, logistics, deployment at scale, grid concerns)

3.6 Status of the procurement process

Variable	Status
IRP	✓
NERSA tariff review finalisation	✓
EIA ROD's	Some given. Delays .Final policy, height of hurdles and time delays uncertain . The process is unfolding
DAFF approvals re agricultural land	Policy not finalised
REFIT scorecard	Not finalised
New generation regulations	Not finalised
Civil aviation authority approvals	Slow, uncertain how radar issues etc will be treated
Standardised PPA	Not finalised
Transport and erection approvals and logistics	Untested and complex
Local authority rezoning approvals	Untested but may await DAFF certainty
Grid access and readiness	Probably ✓ but large disconnect with EIA and DAFF
Generation licences	Probably ✓

4. Quantitative responses (what should the recalculated REFIT be?)

4.1 WACC assumption is incorrect

4.2 Indexation approach is erroneous

4.3 Suggested tariff NPV is lower than megaflex NPV

4.4 Additional comments on the calculation methodology

4.1 WACC assumption is incorrect

- Nominal cost of debt should be 13.5% of 9.93%
- This leads to a WACC of 11.9% not 9.8%

4.2 Indexation approach is erroneous

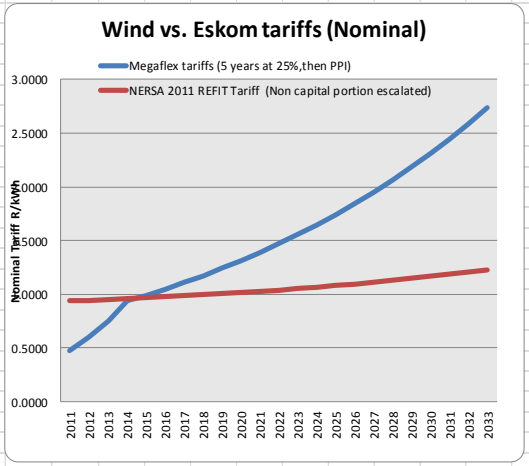
- In REFIT 2009 entire tariff was indexed
- For “Constitutional” reasons alone this should be maintained
- However the fact that in revised tariff calculation this is not done leads to a tariff that cannot sustain the industry – lack of indexation would dictate a higher staring tariff not lower

4.3 Suggested tariff NPV is lower than megaflex NPV

- Means wind would be subsiding Eskom and the consumer – not the idea behind REFIT
- Would lead to bilateral PPA's rather than a REFIT scheme

TARIFF ANALYSIS & PROJECTIONS

Detail		Dec-09	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
ASSUMPTIONS																										
MegaFlex Tariff	Megaflex: 5 years of 25% then PPI		24.80%	25.80%	25.40%	25%	25%	5.80%	5.80%	5.80%	5.80%	5.80%	5.80%	5.80%	5.80%	5.80%	5.80%	5.80%	5.80%	5.80%	5.80%	5.80%	5.80%	5.80%	5.80%	5.80%
NERSA 2011 REFIT Tariff	Capital Portion				0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	O&M Portion				5.80%	5.80%	5.80%	5.80%	5.80%	5.80%	5.80%	5.80%	5.80%	5.80%	5.80%	5.80%	5.80%	5.80%	5.80%	5.80%	5.80%	5.80%	5.80%	5.80%	5.80%	5.80%
ESKOM TARIFFS																										
Megaflex tariffs (5 years at 25%,then PPI)		0.33	0.38	0.4780	0.5995	0.7493	0.9367	0.9910	1.0485	1.1093	1.1736	1.2417	1.3137	1.3899	1.4705	1.5558	1.6460	1.7415	1.8425	1.9494	2.0624	2.1821	2.3086	2.4425	2.5842	2.7341
NERSA 2011 REFIT Tariff (Non capital portion escalated)	Capital			0.8200	0.8200	0.8200	0.8200	0.8200	0.8200	0.8200	0.8200	0.8200	0.8200	0.8200	0.8200	0.8200	0.8200	0.8200	0.8200	0.8200	0.8200	0.8200	0.8200	0.8200	0.8200	0.8200
	Non-Capital			0.1180	0.1248	0.1321	0.1397	0.1479	0.1564	0.1655	0.1751	0.1853	0.1960	0.2074	0.2194	0.2321	0.2456	0.2598	0.2749	0.2908	0.3077	0.3256	0.3444	0.3644	0.3856	0.4079
				0.9380	0.9448	0.9521	0.9597	0.9679	0.9764	0.9855	0.9951	1.0053	1.0160	1.0274	1.0394	1.0521	1.0656	1.0798	1.0949	1.1108	1.1277	1.1456	1.1644	1.1844	1.2056	1.2279
	Discount rate																									
Megaflex NPV	18%	R 5.44																								
NERSA 2011 NPV	18%	R 5.34																								



4.4 Additional comments on the calculation methodology

- O & M assumption is too low. Our international members think a range of ZAR 0.14-0.16 is fair and accords with their experience.

- The percentage changes reflected in Table 5 are calculated on an absolute basis and should rather be calculated on an inflated 2009 number.

- The NERSA levelised cost model assumes that both debt and equity receive returns uniformly throughout the 20 year period. Often however debt is repaid over 15 years (not 20) and where this consumes the majority of the early income stream. The return to equity is tail-ended and without full indexation, due to inflation effects, the value of these returns are eroded.

- Installed capex costs are likely to be as high as USD 2.3M/MW.

5. In Summary

- SAWEA supports periodic REFIT tariff review – process should not prejudice NERSA's broader mandate which is collective energy well-being.
- Wind power in SA has seen a decade of very limited success (8 turbines installed). Rapid industry development crucial for success of the IRP 2010 and COP17.
- Industry has believed tariff would hold until after first procurement. Suggest the recalculated tariff should only apply for the years 2014 and further.
- Suggest establish a transparent set of assumptions and calculation methodology for REFIT in order to engender investor confidence and avoid continuous debate/conflict
- It is submitted a correct recalculation yields a REFIT value close the 2009 value.
- Certain of the draft criteria for IPP selection will have presently unaccounted and un-quantified cost implications and are likely to dictate an amendment to the assumptions/methodology of calculation of REFIT.