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Energy White Paper Taskforce
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RE: 2014 Energy White Paper – Issues Paper

General Electric (GE) commends the Australian Government for initiating an Energy White Paper this year *"as part of a broader package of Government reforms*... [and] *set out an integrated and coherent Australian Government position on energy policy".*[1]

Since 1896, GE has been a supplier, developer and financier of projects in Australia across a wide range of fuels and technologies. As a major local employer with experience in energy markets around the world, GE offers a unique perspective to the further development of energy policy.

In recent years, GE has contributed to major projects in Australia. For instance, GE has been working on all LNG projects under development in Australia today. GE equipment is used in the upstream gas gathering areas, both subsea and surface; upstream and downstream compression; and we also provide a range of instrumentation and control equipment for both the upstream and downstream sections of the projects. GE's first wind project was the 55MW Mumbida wind farm near Geraldton in Western Australia, and GE with consortium partner Downer EDI Limited were awarded last year to supply turbines, build and maintain the 113MW Boco Rock wind farm in New South Wales. GE had also supplied combined cycle gas turbines for Origin Energy's 630MW Darling Downs Power Station in Queensland.

GE has worked with successive governments on the shared ambition to promote energy supply reliability, sustainability and affordability.

Therefore, GE welcomes the opportunity to work with the Government to explore *"measures to support investment and growth in the energy market and resources sectors including regulatory*

[1] Department of Industry (Cth), "Energy White Paper: Issues Paper", December 2013, page i

reform, workforce productivity, the development of both traditional and new energy sources, and maximizing export opportunities for energy commodities, products, technologies and services".[2]

GE's 2013 publication *The Age of Gas and Power of Networks* recommended that a strong enabling environment for gas network development is built upon:

- a clear and durable governmental vision with commitment;
- regulation that is transparent, reasonable and responsive to the pace of business;
- market structures that support investment;
- public outreach and worker education and training;
- support for innovation;
- attention to environmental externalities; and
- building the service eco-system around the network.

GE believes these principles for gas network development are transferrable to the broader energy sector.

In response to the previous Government's Draft EWP - *Strengthening the Foundation for Australia's Energy Future* in March 2012, GE made a series of recommendations. Since its September 2013 election, the Australian Government has made significant decisions relevant to these recommendations such as:

- proposing the Department of Environment with its *"requisite skills and expertise"*[3] undertake the RET review this year in consultation with the Department of Industry once it has abolished the Climate Change Authority. GE notes the Government intends the results of the 2014 RET review are to be integrated into the EWP;
- agreeing with 12 other World Trade Organisation (WTO) Members to strive for global free trade in environmental goods by working together and with other WTO Members and build upon APEC Leaders' commitment in September 2012 to reduce tariffs on the APEC List of 54 Environmental Goods to 5% by 2015; and
- committing to harmonization on issues related to the development of coal seam gas resources, such as buffer zones and other aspects of the regulatory framework to balance environmental and land-use concerns with the development of coal seam gas (CSG).

In addition to these actions, the Government has committed to repealing carbon pricing and the Mineral Resource Rent Tax; developing an East Coast Gas Market Strategy; implementing the Direct Action Plan (including Emissions Reduction Fund); and streamlining environmental approval processes. GE notes the continued operation of the RET was a pillar of the Coalition's Direct Action policy.

Consistent with the Government's plan for an integrated energy policy, the Government has prioritized the following policy areas in its EWP Issues Paper:

- The Security of Energy Supplies
- Regulatory Reform and Role of Government

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[2] ibid

[3] The Honourable Greg Hunt MP, *"Hansard – Climate Change Authority Abolition Bill 2013: Second Reading Speech"*, November 4 2013

- Growth and Investment
- Trade and International Relations
- Workforce Productivity
- Driving Energy Productivity
- Alternative and Emerging Energy Sources and Technology

In response to the EWP Issues Paper, GE urges the Government consider the following recommendations:

1. **continue to promote investment in the development of additional gas projects by streamlining environmental approvals, harmonizing regulatory frameworks across jurisdictions and encouraging the adoption of new technologies and development concepts, such as floating LNG;**
2. **reaffirm the Standing Council on Energy and Resources' (SCER) two core gas market policy principles of (a) ensuring that supply can respond flexibly to market conditions and (b) promoting market development to provide adequate domestic gas supplies;**
3. **maintain a stable GWh Renewable Energy Target to deliver the bipartisan commitment to additional renewable energy generation and not adversely impact on investments made, approved or planned;**
4. **commission an audit of the skills supply, need, specific qualifications and assess gaps for the energy sector through consultation with industry participants, training providers and governments similar to the National Resource Employment Sector Taskforce (NREST) undertaken in 2009-10;**
5. **continue to strive for liberalization of tariff and non-tariff barriers in the trade of environmental goods through trade negotiations including the Trans-Pacific Partnership (TPP) agreement and WTO, based on the landmark APEC decision in 2012; and**
6. **strengthen co-existence between energy projects and existing landholders and their dependent communities should include further concessions for the treatment of income payable to host landholders.**

<u>Recommendation (1)</u>: continue to promote investment in the development of additional gas projects by streamlining environmental approvals, harmonizing regulatory frameworks across jurisdictions and encouraging the adoption of new technologies and development concepts, such as floating LNG

In its *The Age of Gas and Power of Networks* report, GE projected that *"expanding the global role of gas will require a new wave of investment, additional policy adjustments and coordination as well as continued technology innovation"*[4] as evidenced by the development of Australia's offshore reserves and coal seam gas in Queensland.

The EWP Issues Paper identifies the dual priorities of *"removing barriers that may limit a supply response and improving the market's ability to operate in a more dynamic environment are increasingly important"*[5] particularly in terms of CSG reserves in New South Wales and onshore

[4] General Electric, *"The Age of Gas and Power of Networks",* 2013, page 24
[5] Ibid, page 13

tight and shale gas reserves in Western Australia, Queensland, South Australia and the Northern Territory.

The EWP Issues Paper acknowledges the:

> *"[A]doption of new technologies and energy sources (for example CSG) has the potential to outpace the capacity of authorities to development and implement the corresponding regulatory frameworks. Rates of adoption should be monitored and appropriate regulatory responses developed that meet community expectations and do not impede industry development".*[6]

GE's *The Age of Gas and Power of Networks* report stated:

> *"If the environmental benefits of utilizing gas are part of the core value proposition relative to alternative hydrocarbons, then focus on reducing the environmental impact is essential for the industry to reach its potential. A host of technology options are available to improve well integrity, manage water production and disposal, reduce fugitive emissions, reduce diesel use, and optimize operations."*[7]

In terms of CSG industry, GE advocates the use of advanced technologies to:

- reduce the size of the drilling footprint;
- reduce greenhouse gas emissions from drilling sites;
- improve the sustainable treatment of CSG produced water and management of associated brine; and
- reduce fugitive methane emissions.

GE also welcomes the EWP Issues Paper's reference to the establishment of a centre of excellence for floating LNG at Perth, Western Australia. GE believes floating LNG systems are likely to be one of the fastest growing parts of the gas network over the next decade.

The streamlining of major project development approvals, harmonizing regulatory approaches to CSG and promoting market transparency are key initiatives to facilitate investment in new projects and expansions of existing projects.

The EWP Issues Paper states:

> *"Significant ongoing investment in Australia's production capacity and supply infrastructure is needed to ensure a continuation of the economic benefits derived from our energy and resources sectors. Such investment will increase market share through competitive and reliable supply".*[8]

At the end of October 2013, BREE identified 92 resources and energy projects at the publicly announced stage of the investment pipeline with a combined value of up to $152 billion, with 162 projects with a combined value of $208 billion were at the feasibility stage[9].

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[6] Ibid, page 20
[7] GE, *"The Age of Gas and Power of Networks",* p47
[8] Ibid, page 24
[9] BREE, *"Resources and Energy Major Projects – October 2013",*

<u>Recommendation (2)</u>: reaffirm the Standing Council on Energy and Resources' (SCER) two core gas market policy principles of (a) ensuring that supply can respond flexibly to market conditions and (b) promoting market development to provide adequate domestic gas supplies

In its June 2012 communique, SCER Ministers noted the *"expectation of increasing use of gas as a cleaner fuel, which are putting increasing pressure on the supply-demand balance"*.[10]

The Australian Government's Bureau of Resources and Energy Economics (BREE) had warned:

> *"In the longer term lower gas prices due to a domestic reservation policy reduce market returns to producers and lower their incentive to make further investments that would help shift the future supply curve of gas downwards. Thus, over the long run, gas reservation policies can lower investment in further gas supply developments and result in higher domestic gas prices than otherwise"*.[11]

The EWP should acknowledge gas network growth, coupled with technology innovation, is contributing to creating greater network density, greater flexibility and improved economics. Specifically, natural gas-fired distributed power technologies can assist to overcome transmission challenges for domestic users as well as the capability to improve resiliency.

<u>Recommendation (3)</u>: maintain a stable GWh Renewable Energy Target to deliver the bipartisan commitment to additional renewable energy generation and not adversely impact on investments made, approved or planned

The Government will review the Renewable Energy Target in 2014. As aforementioned, GE believes – in the absence of the Climate Change Authority - the Government's proposal for a comprehensive public review to be undertaken by the Department of Environment in consultation with the Department of Industry is appropriate.

While the EWP Issues Paper indicated the RET review would be *"in large part to consider the impact of the policy on electricity prices"*[12], the Authority's 2012 review cited the downward pressure on wholesale electricity prices that can be exerted by the RET. The Authority's recommendation to maintain the GWh target trajectory of the Large-scale Renewable Energy Target (LRET) of 41,850GWh by 2020 was accepted by all major parties.

While the Government's plan to abolish the fixed carbon price and halt the transition to an emissions trading scheme from July 2015, its replacement – Direct Action (including the Emissions Reduction Fund) – remains under development. The Government has committed the continued operation of the RET would be part of its Direct Action program.

The Authority's 2012 RET review identified uncertainty about the broader policy framework and the amendments to the RET since 2009 when concluding that:

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[10] Standing Council on Energy and Resources, *"Meeting Communique"*, 8 June 2012"
[11] Bureau of Resources and Energy Economics (Cth), *"Gas Market Report"*, July 2012, page 60
[12] EWP Issues Paper, page 36

> *"[T]he existing* [LRET] *target of 41 000 GWh should not be reduced. In arriving at this judgement, the Authority has given particular weight to stability, predictability and investor confidence for the LRET and climate policy more broadly. Since 2009, a number of significant changes were made to the RET, which have reduced investor confidence."*[13]

In its contribution to the Climate Change Authority RET review in 2012, the Business Council of Australia stated:

> *"As a key principle, any amendments considered as part of the review should not adversely affect investments that have already been made and should be mindful of their impact on investments currently being planned or already seeking approval. Consideration of the timing of future reviews should take into account both the benefits from reviewing the operation of the scheme and the negative effect on the investment environment that overly frequent reviews can create."*[14]

The RET has enjoyed bipartisan support since its foundation in 2000, and any review should assess its performance against all three of its legislated objects of:

(a) to encourage the additional generation of electricity from renewable sources;
(b) to reduce emissions of greenhouse gases in the electricity sector; and
(c) ensure that renewable energy sources are ecologically sustainable.[15]

GE also believes the relationship between gas and renewables will evolve to complement each other more than compete. The partnership between gas and renewables is built on supporting each other's weaknesses. The variability of renewable sources can be complemented with flexibility of gas-fired power. At the same time, the zero fuel cost associated with renewable generation can provide a valuable hedge against potential gas price volatility.[16]

<u>Recommendation (4)</u>: commission an audit of the skills supply, need, specific qualifications and assess gaps for the energy sector through consultation with industry participants, training providers and governments similar to the National Resource Employment Sector Taskforce (NREST) undertaken in 2009-10

In response to the previous Government's 2012 Draft EWP, GE recommended the formation of an energy sector-specific similar to the NREST.

While the previous Government had allocated $32 million four-year Clean Energy and Other Skills Package to enable tradespeople and professionals in key industries to develop the skills needed to deliver clean energy services, products and advice to Australian communities and businesses, a broader approach to energy skills development should be considered.

The Government's 2014 EWP Issues Paper acknowledged that:

> *"The innovative new technologies associated with the scale-up of renewable energy generation and efficient use of renewable energy pose scientific and engineering*

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[13] Climate Change Authority, *"Renewable Energy Target Review: Final Report",* December 2012, page 60
[14] Business Council of Australia, *"Submission to the Climate Change Authority Review of the Renewable Energy Target"*, 2012, page 5
[15] *Renewable Energy (Electricity) Act 2000*
[16] GE, *"The Age of Gas and Power of Networks",* pages 65, 67

challenges. Fully meeting these challenges will require investment in skills, expertise, infrastructure, research and development. The adoption of emerging technologies will be aided by service providers and testing laboratories."[17]

The adoption of technologies beyond renewable energy generation, including other fuel sources, transmission and distribution, should be also part of the taskforce terms of reference.

Recommendation (5): continue to strive for liberalization of tariff and non-tariff barriers in the trade of environmental goods through trade negotiations including the Trans-Pacific Partnership (TPP) agreement and WTO based on the landmark APEC decision in 2012

In terms of trade, GE welcomes the Australian Government's commitment to liberalise environmental goods and build upon the APEC outcome through the WTO and the ongoing negotiations through the Trans-Pacific Partnership agreement.

The elimination of these tariffs and non-tariff barriers further decrease the cost of delivering renewable and other projects using cleaner technologies in Australia, and provide a freer market for local manufacturers and suppliers of these products in international markets.

Recommendation (6): strengthen co-existence between energy projects and existing landholders and their dependent communities should include further concessions for the treatment of income payable to host landholders

The EWP Issues Paper also concluded:

"Without a social licence, public opposition has been a prominent factor in delaying or adding substantial cost to both traditional and renewable energy projects. This is a particular factor in the inability to progress CSG projects in NSW".[18]

GE has worked with industry partners, project proponents and stakeholders to promote coexistence between energy/resource projects and existing land users, particularly agricultural, and their dependent communities.

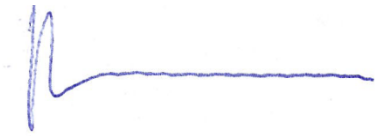
With regard to existing land uses, GE proposed to the then Australian Government in 2012 that it examine the non-farm income threshold for primary producers to access the Farm Management Deposit (FMD) Scheme in recognition of the additional sources of revenue for many landholders derived from the development of the CSG sector and expansion of wind farms. In 2013, the National Rural Advisory Council and the Australian Government accepted the non-farm income threshold for the FMD Scheme be increased from $65,000 per annum to $100,000 per annum effective from July 2014.

The EWP Issues Paper highlights the additional process of the Agricultural Competitiveness White Paper being undertaken by the Australian Government. The opportunity exists for the Government to consider other measures to strengthen co-existence between new projects and existing land uses as well as boost resilience of primary producers. These measures should

[17] Ibid, page 36
[18] EWP Issues Paper, page 21

include classing income payable to primary producers from energy and resource projects as "assessable primary production income" under the *Income Tax Assessment Act 1997*.

GE welcomes the opportunity to participate in future stages of the EWP process. If GE can provide additional information or clarification, please contact me on (07) 3001 4339 or kirby.anderson@ge.com.



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