

A Strategic Plan for Investment in New Mexico Renewable Energy

Executive Summary

The State Investment Office (“SIO”), with assistance from the State Land Office, the Economic Development Department, Indian Affairs Department, Energy, Minerals, and Natural Resources Department, Environment Department, and New Mexico Renewable Energy Transmission Authority (“RETA”), and in response to the request made by House Memorial 9, has prepared this strategic plan for investment in New Mexico renewable energy, storage, transmission, and ancillary services (“Strategic Plan” or “Plan”). This Plan is recommended to the State Investment Council as a roadmap for the Council to pursue as the Council seeks to make prudent investments that can strengthen the renewable energy industry in New Mexico.

The single most critical element of this Plan is strategic flexibility. Undoubtedly, the renewable energy industry has grown exponentially and is projected to continue to thrive in the future. The share of New Mexico’s energy coming from renewable sources has grown from 5% in 2010 to 25% in 2019 and is expected to exceed 50% by 2023.¹ However, which renewable technologies may become predominant remain uncertain. According to the RETA Report, depending on the availability of transmission, energy regulatory schemes, changes in technology, and other market forces, by 2030 solar energy production in New Mexico is expected to grow between 10% and 1000% while wind generated energy should grow between 50% and 500%. See RETA Report at 56-61. With such large swings possible, any long-term investment strategy must be flexible enough to adapt to changing conditions.

This Strategic Plan is designed to provide a green light. If the Council adopts this plan it will be a signal to the Investment Office to pursue opportunities in the New Mexico renewable energy industry when such opportunities provide the possibility of prudent investment. To date, the Council policy has been to remain neutral and to neither encourage nor discourage investment in renewable energy. Nevertheless, even this neutral position has led to significant permanent fund renewable energy investments due to the tectonic shifts that have already occurred in the energy market. For instance, through participation in various investment funds, the Permanent Funds² currently have invested approximately \$400 million in power generation, of which, roughly two thirds is invested in renewable energy.

This Plan is designed to help promote the viable and emerging New Mexico renewable energy industry. While the Plan may recommend investing in companies with limited track records commensurate with a

¹ See, *New Mexico Renewable Energy Transmission and Storage*, June 2020, prepared for RETA by ICF (“RETA Report”), at 40 and 43.

² As referenced in this Strategic Plan, the Permanent Funds, or simply “Funds,” consist of the Land Grant Permanent Fund (LGPF), currently valued at \$19 billion, and the Severance Tax Permanent Fund (STPF), currently valued at \$5.3 billion.

relatively new industry, after extensive due diligence, the expectation and hope is that these companies will have a clear path to profitability and the investments, accordingly, will generate market rate returns. The national market for renewable energy is maturing and New Mexico, with its abundant natural resources and the ingenuity and hard work of its citizens, is poised to play a significant role in this new and expanding industry. There is little need, or hope, that highly speculative investments can make a meaningful difference in New Mexico's role in the national renewable energy market. As a result, staff anticipates that few, if any, investments brought to the Council for approval under this Plan will be made from the Severance Tax Permanent Fund assets designated for economically targeted investments.

As a practical matter, the Plan simply encourages prudent investments in the New Mexico renewable energy industry. The precise amount invested will depend on the available prudent investment opportunities. Each investment brought to the Council for approval under the plan will be expected to generate returns reasonably proportional to its risks, i.e., market rate returns. As a result, adopting the Plan should not detract from the SIC's expected returns.

The intended impact of the Plan on the Permanent Funds is to possibly change the overall portfolio balance. By adopting the Plan, the Council will be choosing to possibly allocate a larger proportion of the Funds to investments in New Mexico's renewable energy industry than would a hypothetical fund of similar size and investment objectives that did not have a special interest in New Mexico, provided, again, that such investments are prudent. This means that under the Plan if the New Mexico renewable energy industry were to experience an unexpected calamity, the Funds may lose more money than otherwise. On the other hand, if the New Mexico renewable energy industry experiences higher than expected returns, the Permanent Funds might also outperform.

Finally, as ambitious as this Plan may be accelerating the growth of New Mexico's renewable energy industry is not going to arise out of SIC's investments alone. In preparing this plan, through discussions with other investors and state agencies, and review of authoritative studies, it became clear that the bottleneck to growing Mexico's renewable energy industry is not the availability of capital, but the capacity of New Mexico's power transmission infrastructure. Most agree that three factors possibly will drive exponential growth in New Mexico's renewable energy industry: 1) New Mexico's abundance of solar and wind resources; 2) technological advances which have made solar and wind energy cost competitive with energy derived from fossil fuels; and, 3) the environmental impact of fossil fuels becoming increasing politically salient. This anticipated growth is limited only by New Mexico's power transmission infrastructure. This Plan will promote prudent investments in New Mexico's burgeoning renewable energy industry that reasonably can be expected to provide substantial returns to the Funds.

Fiduciary Duty and the Plan

This plan has been created at the request of the New Mexico House of Representatives based upon that body's determination that the New Mexico renewable energy industry is a growth industry and that supporting and promoting this industry will benefit the state as a whole. Accordingly, this plan addresses how the SIC's overall investment policy could be adjusted based upon these legislative determinations. The Council, however, is not bound by these determinations and therefore must consider its own fiduciary duties before adopting a plan grounded on these assumptions. Therefore, as

a preliminary matter, Council Members must consider whether to accept and act upon the two fundamental assumptions behind this plan.

The first assumption, that the New Mexico renewable energy industry is a growth industry, is a type of assumption that routinely drives the Council's investment decisions and is only slightly unusual in the context of the plan. Every investment decision the Council makes starts from an explicit or implicit prediction about the future. Generally, securities are priced based upon the capital market's "consensus" about future performance. Individual investors can be either "bullish" or "bearish" as to a particular security or industry depending on whether they believe the consensus market price under- or overestimates likely future performance.

This Strategic Plan adopts a bullish position on the New Mexico renewable energy industry, meaning that investment allocations would be based upon reasonable growth expectations. Although Council Members generally defer to investment professionals in deciding whether the Funds should take a bullish or bearish investment position on a particular industry sector, the special circumstances of renewable energy may make expert opinion less determinative than usual. For example, while reliable government and private authorities agree that renewable energy production will grow dramatically in the future, their specific long-term predictions differ significantly.³ Given that the long-term growth of the renewable energy industry is subject to political influences (e.g., how political bodies faced with unprecedented climate change will regulate energy production)⁴ as much as business factors (e.g., the relative cost of renewable energy to fossil fuels), Council members may, in this case, have a rational basis to take a bullish position relative to the industry consensus.⁵ Accordingly, Council Members may reasonably conclude, based upon the legislative findings and their own background, that being bullish on New Mexico renewable energy, and thus over-weighting New Mexico renewable energy investment beyond the level of investment that would occur absent this Plan, is prudent.

³ In its Solar Energy Update, published February 20, 2020, the federal government's National Renewable Energy Laboratory (NREL) demonstrated the wide variance in expert opinion by publishing a chart [at 24] comparing the vastly different electric generation projections for 2050 made by Bloomberg New Energy Finance (BNEF), the United States Energy Information Administration (EIA) and NREL. All three models projected huge growth in renewable energy production but differed significantly as to specifics. For instance, both government models predicted that coal and nuclear power would continue to provide significant amounts of energy while the BNEF model predicted that coal and nuclear power production would virtually cease by 2050. Further, the projected share of energy from solar and wind varied from more than 60% (NREL) to about 25% (EIA).

⁴ At this time, many scientists have concluded that the political response generally has not been sufficient to avert severe adverse consequences from climate change. See, e.g., "Global Trends in Renewable Energy Investment 2020," Frankfurt School-UNEP Centre/BNEF.(2020) at 17 ("there is a big gulf between countries' current ambitions, even those [made as pursuant to the Paris Agreement] and what the science tells us needs to be done about global emissions by 2030."). Presumably, if U.S. federal and state governments acted on this scientific consensus and demanded significantly more renewable energy, New Mexico's renewable energy industry would benefit from this heightened demand.

⁵ Investments in the New Mexico renewable energy industry may also lead to additional revenues from state lands that will provide further income to the beneficiaries of the Funds.

The second assumption, that promoting New Mexico’s renewable energy industry is good for the state,⁶ is not the type of benefit that the Council generally considers in making investment decisions. However, the assumption is relevant to the Plan because the plan calls for less diversification, i.e., a greater allocation to New Mexico renewable energy, than might otherwise be deemed prudent. Council Members’ investment decisions are governed by their obligations to make “prudent” investment decisions as defined by the Uniform Prudent Investor Act (NMSA §§ 45-7-601 through 45-7-612) (“UPIA”). Although the UPIA generally favors diversification, a less diversified portfolio can be prudently chosen if “because of special circumstances, the purposes of the trust are better served without diversifying.” UPIA 45-7-604. Here the Funds were established to benefit the people of New Mexico either directly, in the case of STPF, or by funding essential governmental functions, in the case of the LGPF. Accordingly, Council Members, as trustees of the Funds, can prudently choose a less diversified portfolio, more concentrated in New Mexico’s renewable energy industry, because the benefit of this focus to the people of New Mexico is a “special circumstance” that furthers the interest of the Funds.

The Strategic Plan

As this Plan is an investment policy targeting New Mexico renewable energy, the Plan is formatted as are the SIC’s other investment policies.

I. Investment Objective

This Plan anticipates investments in New Mexico’s renewable energy industry may be made from all asset classes identified in the SIC general Investment Policy. Accordingly, the investment objective of this plan is aligned with the SIC’s overarching investment objective which is to preserve the Permanent Funds for future generations and to provide future benefits by growing the Funds at a rate at least equal to inflation. In addition, the plan seeks to possibly invest a larger proportion of its assets in New Mexico renewable energy than would a fund of similar size and investment objective that did not have a special interest in New Mexico. By promoting the growth of New Mexico’s renewable energy industry, it is hoped that these investments will benefit the people of New Mexico

II. Asset Allocation

For purposes of portfolio management, the Permanent Funds are divided into various asset classes that share certain risk and return characteristics. Consistent with this portfolio construction, the Strategic Plan may allocate investments in New Mexico’s renewable energy industry into several of the Funds’ asset classes. Specifically, for reasons explained below, the Plan anticipates investments primarily in real assets, fixed income, and New Mexico private equity. At this time, there is no expectation of investments in New Mexico renewable energy being made in domestic private equity or public equity.

⁶ The potential benefit to the state is intrinsically uncertain. However, the RETA Report estimates that by 2030, developing New Mexico’s renewable energy industry could attract up to \$11 billion in private investments to the state as well as creating 3,700 new jobs (many temporary, but as many as 800 being permanent). See RETA Report at 2.

The dearth of specified investment targets in this plan reflects the fact that, as noted above and in the RETA Report, full development of New Mexico's tremendous wind and solar resources will depend upon increasing transmission capacity in order to move power to the major markets. There are transmission developers working to solve this logjam, however, transmission projects can be controversial to the affected landowners and other stakeholders so the timing of delivery of these transmission lines is uncertain. For this reason, the SIC expects the opportunities for deployment into New Mexico renewable energy projects will change significantly over time.

Finally, while this Strategic Plan will be implemented by making changes to various asset allocations as described in the SIC's current Investment Policy, for purposes of monitoring the success of this program, the SIC will also keep track of these investments as a group. In this way, the staff intends to report, at least annually, the scope and returns achieved by investments made pursuant to this plan. As part of this annual review, staff will identify extrinsic benefits, such as increased employment and tax revenue, resulting from the plan.

III. New Mexico Renewable Energy Investment Policy

The New Mexico Renewable Energy Investment Policy for each of the relevant asset classes is shown below. The applicable, approved Investment Policy Statement for each Asset Class shall further govern and guide the policies set forth below:

A. Real Return/Real Assets

Capital for the Strategic Plan will likely come primarily from the Real Asset component of the SIC's Real Return allocation. Real Return has an allocation of 12% of the Permanent Funds, of which 20% (or 2.4% of the Funds) is allocated to financial assets and 80% (or 9.6% of the Fund) is allocated to Real Assets. As of this writing, the Real Asset portfolio has a net asset value of +/- \$1.7 billion and this figure is expected to grow to +/- \$2.5 billion based on the current size of the Funds. The Real Assets portfolio includes investments in agriculture, timber, energy (upstream, midstream and power generation) and infrastructure (which includes investments in utilities, transportation, communications and certain energy strategies). The Real Asset portfolio contains \$250 MM of Net Asset Value in existing renewables investments through commitments to a variety of infrastructure and energy funds.

Real Assets investments are made through commitments to commingled funds wherein the SIC's capital is pooled with other like investors (generally pension funds, insurance companies and other sovereign wealth funds) and placed in the trust of a reputable investment manager. The manager, in turn, is responsible for the prudent investment of the capital into investments that are consistent with the strategy that the manager has articulated for that fund. In addition, the SIC from time to time enters into co-investments, wherein the SIC commits additional capital (that is, above and beyond the capital committed as an LP to the main commingled fund) to individual investments that for diversification purposes, are too large to be acquired in their entirety by the main fund. In these cases, the co-investment capital is invested alongside the main fund and benefits from the same standard of care and underwriting as the limited partners in the main fund receive. One benefit of co-investment strategies to the SIC is that such investments are made on a no or low fee structure.

For purposes of the Real Asset component of the Strategic Plan for Investment in New Mexico Renewable Energy, capital may be committed to funds investing in hard assets associated with wind farms, solar farms, battery storage, hydroelectric, and transmission in New Mexico. The Real Assets allocation to New Mexico renewable energy will not be invested in renewables-related support services or technology, except where such is ancillary to a hard asset.

In simple terms, the risk spectrum for renewables investments ranges can be described as follows:

Project Status	Description	Representative* Expected Gross Return Range
Pre-Development	Small commitments (less than \$5.0 MM) are used to secure items such as the necessary property rights, perform planning and design work, negotiate a power purchase agreement with a utility or corporate off-taker, secure necessary permits and fixed price construction contracts	20% +
Merchant Build	Once the project is fully permitted with a power purchase agreement in place, capital is needed to construct and commission the project. After a one- or two-year period of operation to prove out the economics, the project is sold.	12% to 20%
Build-to-Core	A build-to-core strategy completes the same activities as the merchant build, however, the stabilized project is held for long term cash flow and appreciation.	7% to 12%
Stabilized	A stabilized renewable asset has been substantially de-risked and is acquired in the expectation of a stable stream of cash flow.	5% to 8%
<ul style="list-style-type: none"> • The ranges provided are highly dependent on location, the credit of the off-taker, the remaining term of the PPA and competitive factors. 		

To date, the SIC has not targeted investments in the pre-development phase of renewables projects but has committed to commingled funds which generate returns primarily through the merchant build, build-to-core and stabilized strategies. For the Real Asset component of the Strategic Plan for Investment in New Mexico Renewable Energy, the SIC may consider investments from pre-development to stabilized, however, the focus will be on build-to-core and stabilized strategies. In all cases, the SIC will expect to earn market rates of return commensurate with the risk profile of the strategy.

The SIC has invested with some of the most highly respected owners and operators of renewable power projects and staff intends to leverage those relationships to possibly execute on other New Mexico renewables investments. In addition, staff will seek to develop relationships with other large renewables managers as well as boutique institutional general partners that have unique expertise in the development, acquisition and/or operation of New Mexico renewables. Staff expects that investments under the Real Asset component of the Strategic Plan will fall into the following strategies:

- Commitments to commingled funds whose managers demonstrate a history of investing or a good faith desire to invest in New Mexico renewables projects. Note that such funds will not be able to commit to invest a certain percent of the fund into New Mexico renewables since our capital will be invested alongside investors from outside of the state and country.
- Co-investment opportunities wherein the SIC will establish a co-investment pool to be available for investment alongside the main fund in that fund’s New Mexico renewables transactions.
- Separate account arrangements wherein the SIC allocates capital to a specific manager with expertise in sourcing and operating New Mexico renewables.

B. Fixed Income

Bond financing holds tremendous potential for future clean energy investments. State and local governments typically issue bonds directly to finance energy efficiency or renewable energy projects. Using bonds allows states and regions to reduce the cost of capital and financial risk. About 75% of green-labeled municipal bonds are issued as revenue bonds – bonds backed only by the revenues of the project being financed, or by some additional limited reserves. A green bond is a bond whose proceeds are used to finance something that bond investors may consider “green”, such as: energy efficiency, renewable energy, public transportation, clean air, waste management, conservation, and certain water projects.

As far as the risk-return profile of these instruments is concerned, these types of bonds will fall in a typical “Core Fixed Income” category, where the relatively low risk – low return instruments provide liquidity, diversification and a certain level of downside protection to the investment portfolio. While default risk for green bonds is deemed to be low, these bonds are subject to interest rate risk, or the risk that rising rates will lead to falling prices. Green bonds also face the risk of adverse headlines (headline risk), such as when a high-profile default makes headlines and drives down the market. Overall, the yield on these kinds of instruments may sufficiently compensate for the additional risks.

Looking at the supply side of the equation, it is worth mentioning that with state, county and municipal agencies being the key players, there is a relatively small opportunity set available for investing. Although this may change if further transmission infrastructure is developed, at this time, the size of the bond issuances is generally small. For example, the City of Santa Fe had a \$13.5 million issuance at the beginning of 2019 and New York State has raised a little over \$24 million to make energy efficiency improvements. Thus, considering the risk-return profile of these instruments as well as the limited opportunity set, the SIC staff believes that the Fixed Income portfolio may comfortably invest in New Mexico renewable energy projects.

C. National Private Equity Program

As discussed above, pursuant to SIC policy, energy-related investments fall under the real assets allocation. Accordingly, the national private equity program will not be the primary source of investment targeting New Mexico’s renewable energy industry. Although it is conceivable that technology related to New Mexico renewable energy, e.g., battery storage technology or computer software may fall within the national private equity program rather than the real assets allocation, SIC

staff is unaware of any such investment opportunities in New Mexico. Further, given their areas of expertise, the national private equity funds the SIC invests with are unlikely to consider investing in New Mexico technology companies related to renewable energy. Therefore, while staff will encourage the SIC's national private equity funds to make investments in New Mexico businesses, and will alert appropriate fund managers of opportunities of which staff becomes aware, at this time staff does not believe it appropriate to allocate any part of the national private equity program to promoting New Mexico's renewable energy industry.

D. New Mexico Private Equity Investment Program

As part of the New Mexico Private Equity Investment Program (NMPEIP), the SIC has the authority to allocate a portion of the assets of the STPF to investments in private equity funds and co-investment vehicles that invest in New Mexico-based companies. These investments are permitted to be "differential rate investments" and are intended to stimulate the economy of New Mexico and to provide income to the STPF. As explained above, due to the New Mexico's intrinsic integration into the national renewable energy industry, staff anticipates that the bulk of investments made pursuant to this Strategic Plan will be market rate and not differential rate investments. Accordingly, investments from the NMPEIP are expected to have a supportive role, rather than a primary role, in the investment strategies discussed elsewhere in this plan.

SIC's staff expects to allocate most of the capital in the NMPEIP to venture capital funds focused on early stage technology investments, some of which may relate to renewable energy. Further, SIC's staff also expects to evaluate a number of potential investment opportunities in private equity funds and co-investment vehicles that invest more directly in the New Mexico renewable energy space. Opportunities would be evaluated based on 1) their potential returns on investment, 2) an examination of their investment risks and 3) potential to further the specific goals of this program. The attractiveness of the potential renewable energy investments will determine the ultimate weighting in the NMPEIP.

E. Public Equity

Although the SIC has allocated a large portion of its investments to public equity, none of this allocation can be reasonably targeted to promote New Mexico's renewable energy industry. At this time, staff is aware of only one publicly traded company that has significant involvement in New Mexico's renewable energy industry. Even as to this one company, only a small portion of the company's business derives from renewable energy. Accordingly, for now there are no reasonable opportunities for the SIC to invest any part of its public equity allocation in New Mexico's renewable energy industry.

IV. No Third-Party Marketers

As with all of the SIC's investments, no third-party marketers or placement agents will be paid on any of the investments made pursuant to this plan.

Conclusion

If adopted by the Council, this Strategic Plan would not alter the expected returns of the Permanent Funds. However, the Strategic Plan will allocate a larger proportion of the Permanent Funds to investments in New Mexico's renewable energy industry than would a hypothetical fund of similar size and investment objectives that did not have a special interest in New Mexico. If the Council acknowledges that New Mexico's renewable energy industry is growing and that this growth benefits the people of New Mexico, then the Strategic Plan is a prudent strategy that the SIO staff recommends be implemented. By adopting the Strategic Plan the Council may commit to investing a prudent proportion of the Permanent Funds into New Mexico's renewable energy industry.

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