American Reliant Corp. respectfully submit these comments to the May 2\textsuperscript{nd} draft of New York’s RGGI Operating Plan Amendment for 2014.

*American Reliant Corp.* is a New York Corporation founded in 2003 to pursue projects and manufacture equipment for the Renewable Energy sector and Solar Thermal applications in particular. We have been active in a number of projects in the agriculture, food and beverage processing and industrial / commercial markets and continue to encourage manufacturing and application of renewable technologies within New York State.

*American Reliant Corp.* fully supports New York’s Regional Greenhouse Gas Initiative efforts and agrees that “the RGGI portfolio is designed to achieve greenhouse gas emission reductions by:

- Deploying commercially available energy efficiency and renewable energy technologies
- Building the State’s capacity for long-term carbon reduction
- Empowering New York communities to transition to cleaner energy
- Stimulating entrepreneurship and growth of clean energy companies in New York
- Creating innovative financing to increase adoption of clean energy in the State”

We are particularly pleased to see the increased investment in Solar Thermal technologies and approaches, especially Renewable Heat NY, as Buildings and Industry emit 72% of New York’s total greenhouse gases and Solar Thermal measures have been underfunded in most of the state’s other efficiency and renewable efforts.

Unfortunately, Solar Thermal technologies have been misunderstood and dramatically underutilized in New York State. While Solar Thermal qualifies for incentives in many other state RPS programs, in the NYS RGGI allocation schedule it is underfunded and even misclassified as an energy efficiency measure.

In actuality, Solar Thermal is an energy producing technology in exactly the same way as solar photovoltaics, with current applications and technology extending well beyond classic hot water heating to include:

- Combi-systems of facility heat along with hot water;
- Building-wide air- and space-heating;
- Dehumidification;
- Air conditioning and process cooling;
- Process heat for hospitality, commercial and industrial applications.

Since electricity measures are funded by New York’s Renewable Portfolio Standard, Energy Efficiency Portfolio Standard, and Systems Benefit Charge, we believe and strongly advocate that the majority – if not all – of RGGI’s funding should go toward reducing carbon emission via deployment.
of Solar Thermal sources. That said, the $963,779 proposed in the current draft budget allocations is too small to significantly impact the market in a lasting positive and productive manner. We believe the Commission should consider a much larger investment in order to develop New York’s Solar Thermal market into a leader across the US.

There is current pent-up interest and demand in many sectors, including agriculture, brewing, food processing, hospitality, multi-family residences and many other areas which are on hold due to funding and investment uncertainty and which are waiting for the State to send a clear message of policy and financial support for the Solar Thermal sector.

As has been presented by my colleagues in the Solar Heating and Cooling group of the Solar Energy Industry Association, below is our proposed plan to develop the New York State Solar Thermal market in a self-sustaining way while providing both short- and long-term economic and job growth.

### Step 1: Jump-Start the Market:
1. Make the current NYSERDA Solar Thermal program “fuel neutral”
2. Increase per project cap size to $250K
3. Tier incentive deployment:
   - $1.25/kWH for first $8MM deployed
   - $1.00/kWH for next $8MM deployed
   - $0.75/kWH for final $8MM deployed
**Step 2: Increase Private Sector Capital Deployment:**
1. Third Party Equity Investments start
2. Establish M&V Clearinghouse
3. Streamline Permitting
4. Include Solar Air Heating and other Solar Thermal technologies into the NYSERDA Solar Thermal program

**Steps 1 & 2 Results:**
1. Jump-Start the market for solar hot water, solar air heating and other Solar Thermal technologies
2. Reduce installed costs by increasing installation volume
3. SWH workforce development creates labor efficiencies
4. Familiarize consumers and investors with additional Solar Thermal technologies (e.g. cash flows)
5. Attract private capital into the market
6. Increase capital deployment rate for Solar Thermal investors

**Step 3: Solar Thermal as Critical Infrastructure:**
1. Work with natural gas utilities to identify capacity constrained pipeline
2. Develop a utility project fund with Green Bank to deploy Solar Thermal assets in capacity constrained areas; utility receives cash flows with potential yields of 4%-12%
3. Solar Thermal revenues can flow back into natural gas infrastructure investments
4. Reduces long-term impact on natural gas rate-payers through Solar Thermal deployments
5. Utility could also look at rate-basing Solar Thermal assets in capacity constrained areas as a secondary option

**Steps 3 Results:**
1. Significant Solar Thermal deployment reduces total installed system prices
2. Prices align with investor yields
3. Cost of capital reduces as investors become more familiar with technology and more investors enter the market
4. Investor yields increase with more capital deployed across a broader group of assets
5. Develop win-win-win model for consumers, Solar Thermal industry, and natural gas utilities

RGGI funds will be applied to the development of a robust Solar Thermal market. The market participants, given the ability to grow, scale up, and adopt greater efficiencies, will be less dependent on incentives as a result. A major tool in this market maturation will be RGGI funds helping to lower barriers to financial capital and to send a clear signal to developers and owners that New York State recognizes, and is committed to supporting Solar Thermal going forward.

Thank you for the opportunity to comment. We look forward to continuing to participate in the RGGI Stakeholder process.

Respectfully Submitted,

James Cranston
CEO, American Reliant Corp.