ENERGY - As we approach the end of the year and Congress is working to get out of Washington before Christmas, there is a lot to do other than anything relating to energy. With the United Nations Climate Change Conference (COP25) being held in Madrid, Spain from December 2 -13th, the drive to get Climate change labeled as an emergency requiring nations (primarily the US) to ramp up their activities and address CO2 reduction at any cost was on the top of almost any discussion on energy... without using the word energy. In the drive to elevate Climate Change to emergency levels there is a growing demand for countries, states and industry to show what they are doing. Our speakers at the December meetings from the World Bank discussed carbon pricing and stated that 46 national and 31 subnational jurisdictions are putting a price on carbon with a Swedish Carbon Tax set at US $127.00 per ton CO2 e. There is a belief that unless there is a Carbon tax value of somewhere over US $70.00 per ton, there will be no appreciable net benefit to carbon reduction on the global scale and people will not change their life styles to decrease CO2. In their presentation (on the Website) they indicated there are 1,400 companies that have or are planning to put a price on Carbon. These will not go unnoticed. The Task Force on Climate Related Disclosures is gearing up to report on individual company implementation activity. Show me the progress made toward Corporate Goals and Objectives. In all of the presentations last week there was virtually no mention of Thermal Energy. All the discussion was generally related to transportation fuels, electricity and electrification to be able to use renewable electricity. Without addressing thermal energy it will be impossible to achieve any of the future goals and objectives being espoused today. This is where CIBO can have an impact with or without a carbon price. The World Bank ended its presentation with a cartoon “Year 2060: the search for a breakthrough technology to solve climate change continues. It’s a time machine, we hope will take us back 50 years when we should have put a price on carbon.”

Environment - As we approach the last year of the 2016 Trump Administration term, with no guarantee there will be a second term, his EPA must get a number of rules out to be complete before the projected date of around May 25th. This to protect against the next congress going back to overturn what was done and six months before the next Administration’s EPA, if it is not this existing one, takes over and can pull things back for review and change. The Final Boiler MACT rule from the court remand, the PM and Ozone NAAQS determinations and the NSR Reform rules are all up for completion. This is not an easy task with the resistance both the external ENGO community and the internal Obama and Clinton Administrations’ supporters across the government doing whatever they can to delay any action until a new administration takes office. There was a suggestion that EPA is considering a 10 PPM standard for the new PM 2.5 NAAQS down from the current 12 PPM. While there is science that indicates it could be possible for EPA to retain the current standard, in the current environment that might not be possible. Court rulings have complicated the ability of EPA to respond to pollution transport and the New York petition that names many of our industrial facilities as contributing to their attainment problems for 2023 and 2025 as they address the Good Neighbor SIPs that are supposed to
account for this. Water and ash were also discussed last week and you can read about these in the meeting summary that should get up on the web shortly. As part of the meeting we had a speaker from the Chamber of Commerce talk about the activities that have been going on regarding the XGen Chemicals PFAS and PFOS. Perfluorooalkyl and polyfluoroalkyl substances (PFAS) are a large family of chemicals that includes PFOA, PFOS, GenX and other chemicals which were used by many manufacturers to produce a broad range of industrial and consumer products. These are two of a class of manmade chemicals that not much is known about that were used as flame retardants and flame suppression. While they are not directly related to what CIBO does, one method to dispose of them is via combustion. However, as chemicals that were developed to impede, hinder and suppress combustion that is not necessarily easy and could lead to air emissions and the need for Florine removal after combustion. CIBO has signed on to Chamber Comments supporting the need for sound science and understandings before rules and legislation are enacted to require limits that may not be needed in the longer term. Because these chemicals are used by most of our members and CIBO will continue to follow the activity and respond as needed through the Environmental Committee. For our air permitted sources, please review your environmental calendar, for environmental deadlines.

Technical - Initial results for the CIBO 20/20 Survey point toward one of the significant values of CIBO is the technical nature of what we do to support energy and environmental policy and policy implementation at the plant level. This was evident throughout the Committee Meetings last week. The focus group meeting dealt with resilience within the power plant, from looking at liquefied natural gas (LNG) as a resource for facilities that could have problems with natural gas supplies during weather excursions and upset conditions; to looking at natural gas burner additions to provide fuel flexibility to minimize coal use and optimal operations with a carbon constrained world; to, integrating all this into a microgrid including renewal generation and batteries within a facility sized or larger micro grid. The CleanSpark presentation highlighted interesting problems as we begin to incorporate the electrical engineering grid technologies into our mechanical engineering base power plant and thermal technologies. This will be the challenge of the next few years as we begin to implement sustainability goals and objectives within our individual operations. Control systems, switch gear for low voltage (up to 4160 volts) and medium voltage systems (from 4160 to 15 or more KW) and the controls to interface and to connect with and support the externa electric grid will all play and needed and intimate role in the future and resilience of the distributed energy systems within our institutions and industrial operations. CIBO’s 2020 meetings and conferences will address these technical issue and more as we begin putting the agendas together. You should have received an email from Candy Marriott asking if you would be interested in joining the planning groups for any of our meetings. The technical content of the Implementing Sustainability Conference will be incorporated into the Boiler Operations, Maintenance and Performance next may in Hershey, PA. The Industrial Emission Control Technology Conference will again be in Portland, Maine at the end of July in lieu of the beginning of August and will include a technical workshop on sampling and analysis to meet environmental compliance requirements for normal operations and permit compliance requirements. The September Conference in DC will focus on industrial and institutional distributed generation and grid integration, micro grids and generation technologies. If you are interested in helping with the planning of any of our activities, let Candy know cmarriott@cibo.org.

From the President’s Desk – Bob Bessette

It is hard to imagine that next week will be Christmas and we will be entering the year 2020 in about two weeks. They say as you get older the years go by faster – each is a smaller portion of your whole life. In the old days the Christmas season beginning at the entrance of Santa ending the Macy’s Thanksgiving Day Parade brought a sense of awe and wonder, community and nice feelings and positive hope for all. Today, here in DC, the old politics of let’s find a way to make things work and get together has given way to acrimony and division. Next year’s elections and the need for power and control to move the pendulum from Right to Left or Left to Right is blinding many to the beauty of the season where Love and friendship and caring for others more than ourselves brings so much more in return to each of us. Hopefully by the end of this week, our representatives will be able to find some place to end their bitterness and acrimony and let the season of Love and Hope take hold. We here at CIBO wish you the sense of awe and wonder and Love and Peace that come from family and friends as seen from the eyes of the little children. Merry Christmas and Happy New Year.