

# City of Augusta Maine

January 9, 2017

Memo to: Ralph St. Pierre, Assistant City Manager

From: Lesley Jones, Public Works Director *Lesley*

Re: Three phase power at Hatch Hill

Currently the mechanical operations at Hatch Hill use single phase power to operate. This is the only power that is available as the electrical feed into Hatch Hill is the original single phase feed from Route 3 that runs up through the woods and serves Hatch Hill only. It was installed in the 1960's and has never been upgraded. Several pieces of equipment at Hatch Hill need three phase power to operate, such as the recycling balers and leachate pumps. In order to accomplish this, we use roto-phase converters and variable frequency drives so these three phase motors run using single phase power. This makes them operate a little less efficiently and shortens the life of the motors.

There have been several discussions over the years about upgrading the single phase power to three phase power but this was never done due to cost to do this upgrade from Route 3. Bob LaBreck has been working with CMP to bring three phase power to Hatch Hill along Route 105 (South Belfast Avenue), a solution that is affordable. Additionally, Hatch Hill frequently loses power due to the old single phase line coming up through the woods so three phase power would bring more reliable power to the facility, resulting in fewer power outages. Three phase power would also be available along Rte. 105 from the Cony Road intersection to Hatch Hill Road so anyone along that corridor could connect to three phase power if they need or want it.

Even though the landfill will be at capacity in 12-15 years, the existing landfills will generate leachate that will have to be pumped off site for treatment for decades after it is closed. Additionally, Hatch Hill it is likely location for the next disposal solution once Expansion III is full.