WESTERN HVAC
PERFORMANCE
ALLIANCE

~~June 22~~July 7, 2017

To: WHPA Compliance Committee

From: WHPA Online Permitting Working Group

RE: Best Practices in Online Permitting

The "Best Practices in Online Permitting Working Group" was established to identify online permitting systems that are currently in use and document best practices from these systems that can be applied to the creation and implementation of an HVAC online permitting system (OPS). The following data sources were used to inform this effort:

1. California Solar Permitting Guidebook
2. Green It Forward – Streamlined Online HVAC Permitting Program for Cities and Counties of California
3. Energy Code Ace Application Guidelines
4. Recent examples of OPS implementations
   a. State of Oregon
   b. City of San Francisco
5. Input from jurisdictions that currently utilize an OPS

FINDINGS

1. California Solar Permitting Guidebook

   The first California Solar Guidebook was published in 2012 to help make solar installations standardized, less expensive and increase utilization throughout California. The Guidebook is designed to help local governments and their permitting agencies improve permitting of small solar energy systems and help building owners and solar installers navigate permitting as efficiently as possible. There are several recommendations provided in the Guidebook that are directly relevant to the HVAC permitting process.

   - Provide clear written instructions on the permitting process on the Internet and at the department's counter to reduce errors by permit applicants.

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- Use online or electronic application submittal and permit issuance, including use of e-signatures, to minimize or eliminate backlogs at the counter and, thus, free up staff time to focus on more complex permit applications.
- Use a simple eligibility checklist to determine whether projects qualify for expedited permitting and requisite written materials.
- Use simple, standardized forms across jurisdictions to reduce permit submittal errors among contractors working throughout a region and to simplify review for staff.
- Host contractor training events to train contractors on proper permit submittals.
- Allow plan review and permit issuance completed "over-the-counter" for walk-in applications or electronic submittals, or automatically through online software. Maximum timeframe of 1-3 days to review if over-the-counter approval is not offered.
- Establish statewide permit fee limits for residential and commercial projects.
- Enable inspection requests to be submitted online or electronically.
- Provide for on-site inspection during the next business day after notification that the solar system has been installed. If next business day is not possible, schedule inspection within five days.
- Provide a scheduling time window for on-site inspection of no more than two hours, and utilize phone and/or email communication to provide information on anticipated inspection time.

2. Streamlined Online HVAC Permitting Program for Cities and Counties

   Energy Cloud conducted a pilot for an online permitting system in the Imperial Valley. The pilot involved the cities of El Centro, Imperial, Calexico and Brawley and four HVAC contractors that serve the valley. The pilot – which sought to demonstrate the viability of an online permitting platform for HVAC change-outs – started in early 2014 and ran for 18 months. The best practices and lessons learned from the pilot included:

   - Building Departments
     - Value a system that is easy to learn and use
     - Want the ability to verify CSLB license and insurance status to reduce the work load on department staff
     - Prefer a no-cost system
     - See value in increased revenue due to more contractors pulling permits
     - Each have specific processes and requirements that need to be incorporated into an online system
     - Want to maintain their internal permit number system
     - Require ability to accept and manage specific documents required as part of the permit process (e.g. CF-1R)
   - HVAC Contractors
     - Value a system that is easy to learn and use
     - Need to have a system that will incorporate all the different processes and requirements for each jurisdiction in which they operate
     - Prefer minimal interaction with building department personnel
     - Prefer immediate approval of permit application, but same day is acceptable

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Commented [PK1]: ALISON PAUL: Suggest including Pilot Program and Energy Cloud in the title to specify this next section

Commented [PK2]: GARY SHUSHNAR: The survey of these building departments and the resulting documentation that supports these bullet points must be referenced, or these bullets points removed.

Commented [PK3]: GARY SHUSHNAR: The HVAC contractor survey building departments and the resulting documentation should be referenced here by bullet point.

- o Want the system to accept all major credit cards
- o Want all documentation to be accessible online and notification sent via email when permits are approved; want documents to remain online for future download as needed

3. Energy Code Ace Application Guidelines

The Energy Code Ace Web site was developed by the California Statewide Codes & Standards Program and offers free energy code training, tools and resources for those who need to understand and meet the requirements of Title 24, Part 6 and Title 20. These tools were designed to improve compliance with the state's building and appliance energy codes and standards. The program aims to advance the adoption and effective implementation of energy efficiency measures and building practices to lock in long-term energy savings.

There are many tools and resources available at Energy Code Ace that provide much of the information suggested in the California Solar Permitting Guidebook. For example, there are checklists for Plans Examiners that can be used as part of a "HVAC Permitting Guidebook," along with other checklists geared towards contractors.

A best practice would be to integrate Energy Code Ace into building department OPS and/or department websites and use the various resources available to ensure consistency of code requirements and checklist information. This educational tool is a valuable resource and needs to be made more accessible to all parties interacting with online permitting.

4. Recent Examples of OPS Implementations

There are several examples of an OPS implementation that have been discussed within the OPWG. ~~Neither of these examples is particularly positive.~~ There was limited information available regarding the Oregon Statewide Permitting System~~, and~~ the City of San Francisco system was mired in cost overruns which prevented it from being fully implemented and ~~~~the Las Vegas system is too new to form any conclusions. ~~Neither example is particularly useful, but do offer the~~However, the one lesson learned from these examples is that an effective software implementation that can be used across jurisdictions will be difficult and costly and must be managed carefully.

City of Las Vegas

Las Vegas released a new permitting system and website functionality on June 12th, 2017. This new system adds more permits to their online permitting system and also gives contractors and designers the ability to begin the application process online. While this system is too new to know whether there are any best practices that can be applied to other such systems, it is a potential resource for future evaluation. Assuming that sufficient market feasibility for such a system in California can be documented, it may be appropriate to evaluate the Las Vegas system at a later date and report on the findings in an addendum to the Best Practices Memo.

> **Commented [PK4]:** GARY SHUSHNAR: Please reference an article or documentation regarding this implementation

State of Oregon

About 10 years ago, Oregon implemented a statewide electronic permitting pilot to enable the construction industry to apply "for building permits with just a few clicks of a mouse." This system was voluntary and launched with a few jurisdictions in the state. Based on our research, the system has had minimal success. People that we spoke with at the various jurisdictions didn't know much about the system. The only details that we could find was that they system was built on the Accela Civic Platform which is a software solution targeted towards city and state governments.

City of San Francisco

The San Francisco online system was also built on the Accela platform, but ~~for various reasons summarized in an article by the San Francisco Chronicle~~ was never implemented due to cost overruns. Additionally, some observers have indicated that a contributing factor to these cost overruns was a building department that resisted change and requested new requirements that were not part of the original scope.

5. Input from jurisdictions that currently utilize an OPS

Technicians from ~~the cities of Fairfield and Moreno Valley~~several cities were asked their opinions on the online permitting systems currently operating in their building departments. ~~Both~~These individuals were partial to the department-wide integration of the system and verification of information submitted and processed. ~~However, because the systems are web-based, their shared~~ One common dislike ~~that~~ was ~~shared was~~ the slow ~~internet and~~ connectivity speeds of ~~the web-based~~ platforms. System speed ~~operating through an online portal~~ Access to, and the speed of, the permit process, has a direct impact ~~to~~on utilization as it can reduce the throughput of permit processing.

- Permit Technician for City of Fairfield: "We use TRAKiT, and I like the department-wide integration, but I dislike the slow speed that the system operates at."
- Permit Technician City of Moreno Valley: "I like the ability to input the data quickly and then know that it has been received by email submittal. Permit system is Accela and a downfall is it is web-based, so connectivity and response times are slow."
- Permit Technician for El Centro: Use the MyGov permit system. "I like that I can create things on the fly. As issues arise – for instance, state requirements – we can create our own special permits to accommodate new processes with ease. The one thing I don't like is that there are 3 different departments using the system and communication can become tricky. I would like the system to be able to identify which department is utilizing the system and at what time."
- Permit Technician for Lodi: Use the iWork permit system. "It's not serving our needs. I want it to be customer-friendly, where anyone can log on and look at permits and statuses. We only chose this system because it was cost-effective."

CONCLUSIONS

The following conclusions can be drawn from all the resources reviewed to prepare this memo:

- Standardization has served to decrease permit time and increase utilization in the state;
- Templated checklists, forms and agreements should be utilized by all department personnel and applicants to ensure understanding and accuracy of permit procedures;
- Fee schedules need to be organized clearly and readily available to all applicants;
- Building department staff training, during the roll-out period, is necessary to support adoption of the process;
- A singular OPS should be developed and utilized by all statewide jurisdictions to maintain procedural consistency and expedite the permitting process;
- Any system should seek to minimize the impact to the industry, while seeking to be flexible over time;
- Requirements for an OPS system should be well-defined prior to the solicitation process;
- An OPS system should be easy for Building Departments to use and should integrate with their current processes;
- The system should be easy for Contractors to use, reduce their time to apply for permits and enable access to all required documents for future download as needed;
- The system should integrate with other State-implemented systems (e.g. HERS registries) and agencies (e.g. CSLB for license verification) to facilitate permit approvals;
- The OPS system should be offered to Building Departments for little to no cost; and
- Implementation should be carefully managed to minimize the potential for cost overruns.

Additional recommendations provided by OPWG members include:

- A statewide system should not prevent the municipalities that already have OPS from continuing to use the systems they are already using;
- Any party interested in a particular permit should be able to login to the system (via smartphone, tablet, or other) and validate permit closure;
- The system should use GPS for determining job locations and, if a job is in a municipality that uses their own system, the system should simply direct the user to the municipal system;
- Ensure that any online permitting system evaluated can deliver on what is promised as stated;
- System should have the ability to send email or text notification to contractor that a permit has been filed or closed;
- System should have the ability to send notification to permit technician, property owner or any other interested party that their permit is expiring and needs renewal, or needs to be closed and completed; and
- Streamlined permitting should have a feature/interface that allows utilities to easily check on the status of the permit and all other public record documents pertaining to the work as needed to confirm eligibility for programs/rebates.

Commented [PK7]: ALISON PAUL: Should we add anything about speed of system and identifying which department/user is logged on? Those seemed to be key components of the jurisdiction feedback.

Commented [PK8]: GARY SHUSHNAR: Please delete this entire paragraph. This is not a "Conclusion", and is unsupported by any research of building departments or contractors.

RESOURCES

1. City of Las Vegas Building Permits webpage link:
    https://www.lasvegasnevada.gov/portal/faces/wcnav_externalId/pl-building-permits?_adf.ctrl-state=bedbajlh4_4&_afrLoop=37742081957181522
2. *"Oregon expands statewide online permitting service"*, bizjournals.com, October 9, 2006,
    http://www.bizjournals.com/portland/stories/2006/10/09/daily7.html
3. *"Oregon to Pursue Nation's First Statewide Online Permitting Service"*, Salem-News.com, October 11, 2006, http://www.salem-news.com/articles/october112006/const_permits_101106.php
4. *"State of Oregon Honored for Accela-Based Statewide e-Permitting Website"*, Marketwire, September 20, 2011, https://www.yahoo.com/news/State-Oregon-Honored-Accela-iw-3393250198.html
5. The State of Oregon – Building Permits (BuildingPermits.Oregon.gov) webpage link:
    https://aca.oregon.accela.com/oregon/
6. The City of Portland Oregon – BDS Permits Online webpage link:
    https://www.portlandoregon.gov/bds/42781
7. *"Building inspectors' online permit tracking mired in bugs, blame"*, San Francisco Chronicle, November 29, 2015, http://www.sfchronicle.com/bayarea/article/Building-inspectors-online-permit-tracking-6663895.php